



1908.

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FORTY-THIRD

# Annual Report

TO THE

**Bath Urban Sanitary  
Authority**

BY THE

MEDICAL OFFICER OF HEALTH

AND

SANITARY INSPECTOR.

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*FOREWORD.*

*"The actual effects of causes, whether salutary or injurious,  
remain always far short of their tendencies."*

—JOHN STUART MILL.

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BATH :

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1909.

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# BATH URBAN SANITARY AUTHORITY

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## MAYOR :

Councillor J. W. KNIGHT, J.P.

## HOUSING OF THE WORKING CLASSES COMMITTEE.

### CHAIRMAN :

Councillor G. F. POWELL.

Alderman W. F. GOULD.

### COUNCILLORS :

J. HOWARD

R. W. KIRKUS

C. H. LONG

M. St. JOHN MAULE

P. C. H. RYAN, M.D.

C. J. TABOR, M.B.

T. B. TIMMINS

A. W. WILLS

### Sub-Committee Insanitary Areas.

Chairman—Councillor R. W. KIRKUS.

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## SANITARY COMMITTEE.

Meeting every alternate Monday at 11 a.m.

### CHAIRMAN :

Alderman J. RUBIE, J.P.

### ALDERMEN :

E. E. PHILLIPS, J.P., M.R.C.S.

E. G. PEACOCK,

T. VINCENT.

### COUNCILLORS :

C. CHIVERS, J.P.

V. EVANS

A. H. FORTT

P. JACKMAN

B. JOHN, J.P.

PRESTON KING, M.D.

W. F. LONG

O. NEWMAN

J. W. PATON, M.D.

T. F. PLOWMAN, J.P.

P. C. H. RYAN, M.D.

F. W. SPEAR

H. J. THOMAS

A. W. THOMAS, J.P.

T. B. TIMMINS

W. WITHERS

### Sub-Committees.

Appointed by the Sanitary Committee.

### GENERAL PURPOSES.

Chairman—Alderman E. G. PEACOCK.

### MIDWIVES' ACT, 1902.

Chairman—Councillor J. WILSON PATON, M.D.

### STATUTORY HOSPITAL MANAGEMENT.

Chairman—Alderman T. VINCENT.

## City and County Borough of Bath.

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### Health Department.

**Medical Officer of Health, School Medical Officer and  
Superintendent of Statutory Hospital.**

WILLIAM HENRY SYMONS, M.D. (Brux.), D.P.H. (Oxon.),  
M.R.C.S., F.I.C.

Residence—39, Combe Park, Weston, Bath.

Telephone 39, Weston, Bath.

**Medical Attendant of the Statutory Hospital.**

OCTAVIUS A. G. COLLINS, B.A., B.C. (Camb.), M.R.C.S., L.R.C.P.

**Matron at the Statutory Hospital.**

Miss MARY CROFTS, L.O.S. Certificate.

**Lady Health Visitor for the City.**

Miss ELIZABETH AXTEN, C.M.B. Certificate.

**Public Analyst and Gas Examiner.**

JAMES WRIGHT GATEHOUSE, F.I.C., 36, Broad Street, Bath.

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### General Sanitary Staff for 1909.

**Chief Inspector and Inspector of Nuisances, Inspector  
under Canal Boats Act, Food and Drugs Act, Shop  
Hours Act, and Dairies, Cowsheds and Milkshops Order.**

WALTER A. CRAVEN,

Cert. as Inspector of Nuisances and as Meat Inspector.

Residence—Kirkthorpe, St. Saviour's Road. Tel. 436, Bath.

**Sanitary Inspector and Inspector of Tenement Houses.**

WALTER T. BLAKE,

Certificate as Inspector of Nuisances.

**Assistant Inspectors.**

SILAS D. HAWKINS and HAROLD BURT.

**Clerks.**

Chief Clerk, Vacant. Junior Clerk, WILLIAM G. PYATT.

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**Health Office, Guildhall, Bath. Telephone 124, Bath  
Statutory Hospital, Claverton Down. Telephone 198, Bath**

# SUMMARY OF STATISTICS, 1908.

## City & County Borough of BATH.

### Health Resort and Chief Town of Somerset.

Situation—Latitude  $51^{\circ} 23'$  N. ; Longitude  $2^{\circ} 21'$  W.

Elevation—Varies from 50 feet above sea level on the lower bank of the Bath Avon to about 550 feet on either side, the hills rising to about 750 feet not far from the City.

Mean Elevation—285 feet above sea level.

Geological Formation—Oolitic clays, limestones and sands.

Rainfall—Average of 40 years, 1866-1906, 30.47 inches annually.  
1904, 25.02; 1905, 22.79; 1906, 27.24; 1907, 32.32; 1908, 24.13 inches.

Water—Constant service, Corporation Reservoirs.

Moderately hard, spring water.

Average amount, 22 gallons per head.

Sewage disposal almost exclusively by water carriage.

House refuse removed and cremated by the Sanitary Authority.

Area of the Borough—3,338 statute acres land, 44 acres water.

Population—1901 Census, 49,839 ; Estimated 1908, 50,000.

Density of Population—Per acre, 15; per inhabited house, 5 persons

Number of Inhabited Houses—Census, 1891, 8,933 ;

„ „ „ „ Census, 1901, 9,323 ;

Number of Occupied Houses—Census, 1901, 9,804 ;

„ „ „ „ Rate-book, 1908

Assessable Value, October, 1908, £ 330,329.

Rateable Value. October, 1908, £ 332,746.

Rates—District Rate,  $3/4$  ; Poor-rate,  $2/8$  ; Total, 6/- per £1.

One penny Poor Rate produces £ 1,267 ; 1d. District Rate £ 1,220

Total Nett Indebtedness, £ 500,131.

Marriages Registered, 433 or 174 persons per 1,000 population.

Birth-rate—Average, 1891-1900, 20 ; 1908, 19.5 per 1,000.

Death-rate—Average, 1891-1900, 18.58.

Crude Death-rate, 1908, 16.8 ; Nett Death-rate, 15.1 per 1,000.

Recorded Death-rate reduced to standard age and sex for comparison with other districts 13.7 per 1,000.

Comparative Mortality Figure, 932.

Death-rate from seven principal “ zymotic diseases,” 0.96 per 1,000.

Infantile Mortality—79 per 1,000 Births.

Deaths under 5 years of age, 133 ; or 2.7 per 1,000 of all ages.

Deaths between 5 and 60 years of age, 239 ; or 4.8 per 1,000

Deaths over 60 years of age, 397 ; or 7.9 per 1,000 of all ages.

Deaths from Phthisis, 57, or 1.1 per 1,000 population.

## To His Worship the Mayor, and to the Aldermen and Councillors of the City of Bath.

GENTLEMEN,

I have the honour of submitting to you the Forty-third Annual Report on the Sanitary Condition of Bath, counting from the first printed Report of a Medical Officer of Health, or the Thirteenth counting only those which I have made personally. I shall give first the most important statistics and then deal with the subjects as desired to by the Local Government Board.

The Death-rate for England and Wales for the year 1908 was 14·7 per 1,000 population, which is lower than the rate of any other year on record. The Death-rate for Bath was slightly above that of any of the five preceding years, but was well below the average of the ten preceding years, 1898-1907. The causes of increase of the Death-rate for 1908 are discussed on page 51, an epidemic of measles was the principal factor.

Including all deaths registered in Bath the Crude Death-rate was 16·8 per 1,000, excluding deaths among those persons brought to Bath for treatment, the Nett Death-rate was 15·1 per 1,000, which when multiplied by the factor for correcting the standard age, shows a Corrected Death-rate 13·7 per 1,000, or 1·1 per 1,000 below the lowest Death-rate ever recorded for England and Wales, or for the 142 smaller towns, and slightly below the Death-rate for Rural England. The Death-rate for Bath was 2·2 per 1,000 below the Corrected Death-rate of the 76 great towns, among which Bath will probably be included at no distant date.

The Infantile Mortality for 1908 was the lowest ever recorded in Bath, being 87 per 1,000 births if we include deaths of Infants brought into Bath Workhouse from outside districts, or 79 per 1,000 births if we count only the births and deaths of Infants of residents. Among Infants born in wedlock the mortality was at the rate of 75 per 1,000 births, while among those classed as illegitimate the mortality was 143 per 1,000 illegitimate births. The Infantile Mortality for England was 121 per 1,000 births, and for Rural England 110 per 1,000 births.

The Birth-rate was 19·5 per 1,000 population, which is higher than the rate of either of the two preceding years, and nearly up to the average of ten preceding years. The Birth-rate for England was 26·5 per 1,000, which was 0·2 per 1,000 above that of 1907, but 1·6 below the average of ten years 1898-1907.



### **Physical Features and General Character of the District.**

Bath is situated in N. Lat.  $51^{\circ} 21-24'$  and W. Long.  $2^{\circ} 20-23'$ , and is built chiefly upon the Lias and Lias Clays, but the Upper Lias or Midford Sands, Inferior and Great Oolites, and the Fuller's Earth lying between them, are well represented in the higher portions of the city, while Mammal Drift Gravel and Alluvium form the sub-soil near the river, but the deposit of Gravel is more extensive than Alluvium.

Bath lying in a bend in the valley of the Avon has sloping ground with every possible aspect, but the slopes facing South and South-West have been most built upon. The elevation of the city varies from 60 feet on the banks of the river, to about 550 on either side. The mean elevation of Bath being 285 feet, according to my estimate. Half-a-mile outside the Northern boundary, Lansdown rises to about 750 feet above the sea level. The mean elevation of London is 60 feet above the sea level, or less than 3 feet above Pulteney Weir.

### **The Population of the City of Bath and Bath Rural District.**

By the census of 1891 the population of the City was 51,844, and by the census of 1901 the population was 49,839. The population in the middle of 1908 may be any number between 48,000 and 52,000. For statistical purposes I estimate the population to be 50,000. The Registrar-General assumes the rate of decrease between 1891 and 1901 to have continued to the present time, and estimates the population in the middle of 1908 as 48,751.

In 1891 the number of inhabited houses was 8,933, uninhabited 795, building 86. In 1901 the number of inhabited houses was 9,323, occupied but not inhabited 481, void 611 and 62 building. By the Rate Book on October 1st, 1908, the number of occupied houses was 10,461, an increase of 688 above the returns of occupied houses in 1901; the total number of void houses 792, an increase of 209. The number of new houses certified by the City Surveyor as fit for occupation from December, 1900, to December, 1908, was 1,128, which leaves 231 as unaccounted for or as demolished for street improvements.

The number of persons per house, house density, has been gradually decreasing. In 1891 it was 5·8, 58 per 10 houses inhabited ; in 1901 53 per 10 inhabited houses and 53 for 10 occupied houses. From 1905 I have considered the house density as 5 persons per house—this is probably an over estimate—48 persons for 10 occupied houses is more likely to be correct, and on this basis the population would be 49,747. I estimate the number of inhabited houses to be 9,800 and the house density per inhabited house 5·1 ; on this basis the population is 49,980. Occupied houses include those occupied by day but not inhabited by night.

The population may also be calculated from the number of births over deaths. The total number of births registered in Bath between April 1st, 1901, and June 27th, 1908, was 7,435, the total number of deaths 6,034, but the deaths of residents only numbered 5,443. If there had been no migration the population would be 51,831.

The population may also be calculated from the number of births, but the number varies very much from year to year, thus in 1901 there were 973 births, in 1904 1,034 and in 1907 only 888, the mean number per year for the seven years 1901-1907 was 975, during the first half of 1908 it was 511. The average number of births for the ten years 1891-1900 was 1,060 and the birth-rate 20·8 per 1,000 population. The birth-rate at the present time is certainly not 20 per 1,000 population, and the number of births registered indicate a population of at least 50,000.

The average number of school children on the books of the Elementary Schools in 1908 is 330 in excess of the number in 1901.

The Assessable Value of Bath in 1901 was £304,808, in October, 1908, it was £329,021.

There is nothing to show that the population of the City of Bath has decreased since 1901, every fact points to a slight increase.

Bath is not now an overcrowded city, only some 3 per cent. of the population, 1,510 persons, are living in tenements with more than 2 persons per room. While the number of inhabited houses has increased from 8,933 in 1891 to 9,323 in 1901, the number of tenements of less than 5 rooms has decreased from 5,975 in 1891 to 4,889 in 1901.



## Small Tenements, Bath and Somerset, 1891 and 1901.

The decrease in the population of Bath has been almost entirely due to the diminution of the tenement house population of the central parishes.

In the tenements consisting of one room only in 1891 397 persons were technically overcrowded, in 1901 this number was reduced to 264 persons. Statistics for Twerton and Weston cannot be obtained but the house density of Twerton has only dropped 4 per cent., while Weston has dropped 7, and the City of Bath 8 per cent.

ROOMS IN TENEMENT.	BATH.			SOMERSET.		
	1891.	1901.	PER CENT.	1891.	1901.	PER CENT.
1 -	1,130	856	76	425	311	73
2 -	1,767	1,377	78	4,540	3,393	75
3 -	1,437	1,087	74	8,033	6,077	75
4 -	1,642	1,524	94	20,625	18,078	87

The population of the Bath Rural District in 1891 was 23,352 and in 1901 it was 27,765. By the Registrar General's method of estimating it should be 31,417 in 1908 but it may be any number between 31,000 and 33,000. My estimate is 32,200. The portion near the City I estimate to have a population of 26,730.

### Population of Various Districts adjoining the City of Bath.

	1891.	1901.	1908.
*Twerton ...	...	7,685	11,098
*Weston ...	...	4,933	5,963
*Charlcombe ...	...	646	775
Bathampton ...	...	402	460
Monkton Combe ...	...	1,760	1,743
Batheaston (lower portion)	...		1,513
Upper Swainswick (lower portion)	...		315
Claverton (upper portion) ...	..		340

A representation has recently been made to the Local Government Board with the object of adding the whole of the above-mentioned districts to the City, but it is probable that the application will be granted only as regards the whole of Twerton, the modern portion of Weston, including a population of about 5,000, and the urban portion of Charlcombe with a population of about 700, including two large schools.

## **The Chief Occupations of the Inhabitants and the Influence of any Particular Occupation on Public Health.**

Bath is essentially a residential town and there is no trade carried on in the City which can be said to have any prejudicial influence on the public health—on the other hand for some 2,000 years the locality has been a more or less favourite resort for persons seeking rest and restoration to health, the occupations of many of the inhabitants are such as minister to the wants of a population of this type. The male population is classified as follows :—

Total male population 20,194, over 10 years of age 16,100,  
Retired from business, living on his own means, etc., 3,366.

Engaged in Occupations 12,734, as enumerated below :—

General or Local Government of the Country 343,  
Defence of the Country 170,  
Clergymen and Ministers 145, Church Officers, etc., 25,  
Barristers or Solicitors 61, Law Clerks, 97,  
Physicians and Surgeons 81, Invalid Attendants, etc., 48,  
Teachers 155, Literary and Scientific Men 25,  
Engineers and Surveyors 32,  
Artists and Musicians 205,  
Hotel Servants 76, other Male Domestic Servants, 469,  
Commercial Occupations 699,  
Conveyance of Men or Goods 1,734,  
Gardeners 392, other forms of Agriculture 181,  
Dealing in the Products of Mines and Quarries 150,  
Metals, Machines, etc., 724,  
Precious Metals and Instruments, 229,  
House Building 2,054,  
Cabinet Makers and Furniture Dealers 585,  
Bricks and Pottery 22,  
Chemicals 96, Skins and Leather 56,  
Books and Stationery 356,  
Textile Fabrics 216, Dress 755,  
Food, Tobacco and Drink 1,235,  
Board and Lodging 382,  
Gas, Water and Sanitary Service 73,  
Engine Drivers, etc., 43,  
General Labourers 465, others 255.

## Parks and Recreation Grounds.

### WITHIN THE CITY BOUNDARY.

	Name.	Area in Acres.	How acquired.
PUBLIC.			
	Bradford Road, Combe Down (Playground) ...	1·778	Gift.
	Alexandra Park ...	10·863	Purchased.
	Beechen Cliff and Magdalen Gardens	2·500	
	Henrietta Park ...	7·000	Gift.
	Grove Street (Playground) ...	·400	(Private).
	Hedgemoad Park ...	5·000	Purchased.
	Packer's or Kensington Gardens ...	·175	Gift.
	Royal Avenue and Victoria Park and Botanic Gardens ...	26·920	Purchased by Council from Freemen's Estate.
	Lower Common (Playground) ...	3·642	Ditto.
		<hr/> 58·278	

#### PRIVATE.

	Lower Common ...	7·372	Ditto.
	Middle Common ...	24·209	Ditto.
	High Common ...	39·549	Ditto.
	Sydney Gardens ...	11·378	
	Institution Gardens ...	2·300	Portion given to City.
	Recreation Ground ...	16·000	
	Cricket Ground ...	5·000	
		<hr/> 164·086	

### OUTSIDE THE CITY BOUNDARY, BUT BELONGING TO THE CITY COUNCIL.

	Charlcombe or Larkhall (Playground)	4·000	Purchased.
	Lansdown Woods ...	4·621	Ditto.
	Totals	<hr/> 172,707	

**House Accommodation, especially for the Working Classes:  
its Adequacy and Fitness for Habitation; Action under  
the Housing of the Working Classes Acts.**

The house accommodation for the Working Classes is fully adequate in amount as is shown by the number of voids among houses of low rental value and the absence of overcrowding in occupied houses. Many of the tenement houses are roomy and well built, others have reached the stage of senile decay, and there is a constant demand for small houses of modern type, those built by the Corporation under the Housing Acts being much appreciated. During the past twenty years 345 houses have been demolished for street improvements, including 96 houses which were back-to-back, and 164 houses have been dealt with under the Housing Acts. These have been mostly replaced by private enterprise, the number of new houses certified by the City Surveyor during the ten years 1891-1900 was 865, and during the past eight years 1,128 have been certified. These include 34 houses built by the City Council in Lampard's Buildings and 42 in the Dolemeads. The work in the Dolemeads is still proceeding as rapidly as is consistent with sound policy. There are not more than 250 back-to-back houses in Bath, only 202 if we exclude corner houses with some side windows.

During the past ten years 45 new streets have been constructed in the City, their total length being nearly four miles (3.96). The total length of roads in the City is 66 miles, 51 miles Macadam,  $\frac{1}{2}$  mile Tar Macadam, 3 miles Pitching,  $4\frac{1}{4}$  Wood Paving, Passages and Courts, mostly paved,  $7\frac{1}{4}$  miles.

Probably no other City in England can show better modern houses than many of those which were built in Bath during the eighteenth century, but those who prefer the small modern villa to the commodious terraced house have a good choice in the south-western suburbs of Bath.

The following table gives the number of houses, grouped according to gross rental values, and the number void in October, 1908, for each Ward of the City. In addition to houses there are 944 other buildings, 859 occupied and 85 void. I am indebted to Mr. Hall, Assistant Overseer, for these returns.

**TOTAL HOUSES WITH GROSS RENTAL VALUE & NUMBER OF VOIDS, OCTOBER 1, 1908.**

Not Exceeding	£5	£10	£15	£20	£30	£40	£50	£60	£70	£80	£90	£100	over £100	Total.
Ward:														
Bathwick	35	123	62	141	169	198	173	76	52	46	14	12	42	1143
St. James'	20	128	82	130	151	99	68	57	34	32	13	18	71	903
St. Michael	48	96	44	72	79	66	52	53	36	18	21	11	101	697
Lyn and Wid	386	788	766	801	680	200	112	68	18	11	13	8	14	3865
Walcot, <i>i.e.</i> Lansdown & Kingsmead	163	1235	713	764	623	302	218	167	115	69	55	52	169	4645
	652	2370	1667	1908	1902	865	623	421	255	176	116	101	397	11253
Void:														
Bathwick	1	1	1	7	20	15	28	7	6	6	2	3	3	100
St. James'	1	3	4	4	10	7	1	2	..	..	1	1	..	34
St. Michael	8	16	4	4	3	1	5	2	4	..	..	..	1	48
Lyn Wid	37	25	27	61	57	20	6	3	..	..	1	1	..	238
Walcot, <i>i.e.</i> Lansdown & Kingsmead	18	62	57	53	49	24	29	27	12	11	5	..	25	372
	65	107	93	129	139	67	69	41	22	17	9	5	29	792
Per Centage Void	10	4.3	5.6	6.6	8.1	7.7	11	9.7	8.6	9.6	7.7	5	7.3	7.15



## Common Lodging Houses.

There are seven Common Lodging Houses on the Register, and these provide accommodation for 191 persons. These houses are regularly inspected both by day and night, the number of visits paid during the year was 399.

The houses generally are clean and well kept, and the cleansing and limewashing has been carried out in conformity with the byelaws. Notices calling attention to this requirement are sent to each owner shortly before the specified time for limewashing, namely the first week in April and the first week in October, and the work is usually completed within the legal period.

The nuisances found to exist were not of a serious nature, and were due to defective W.C. appliances, paving, and leaky roof. In each case these defects were remedied upon being pointed out to the owners. Some of the houses are very old and cannot be said to comply with all the conditions we should demand in a modern common lodging house, and it is only by regular inspection on our part, and constant attention on the part of the owners that they have been maintained in a satisfactory condition. One registered house was demolished in connection with the James Street improvement scheme, and another house conducted by the same proprietor was registered in its stead. The old house provided accommodation for 14 lodgers, the new house has accommodation for 42. This common lodging house was formed by almost entirely rebuilding two dilapidated houses (one of which had been closed under the Housing Working Classes Act) on the east side of Avon Street, and is now very suitable for its purpose. Separate lavatory accommodation is provided for the different sexes, there are special means of ventilation in the bedrooms, and the cubic capacity for each occupant is well above the amount required. With the above exception the common lodging houses and their ownership are the same as in the preceding year, and are as follows :—

HOUSE.	REGISTERED KEEPER.		NO. OF LODGERS.
4 and 5 Avon Street	Mrs. Nolan	...	... 42
9 Avon Street	J. Baker	...	... 25
16 and 17 Avon Street	G. Naish	...	... 38
22 and 23 Avon Street	T. Howell	...	... 21
61 Avon Street	T. Howell	...	... 31
62 Avon Street	T. Howell	...	... 12
81 Avon Street	J. Baker	...	... 22

## House Inspections.

The total number of visits made to premises during the year was 5,708. This number includes visits to premises in respect of which complaints were received, houses in which infectious disease had occurred, the inspection of slaughter houses, food stores, offensive trade premises, mews, dairies and cowsheds, common lodging houses, canal boats, factories, workshops, workplaces, and homeworkers' premises, house-to-house inspections, re-inspections, etc.

House-to-house inspections or re-inspections were made at : —

Beaufort Place ... ..	10
Bellmead Cottages... ..	10
Bellmead Place ... ..	9
Brooklyn Road ... ..	52
Fry's Belle Vue ... ..	13
Kirkham's Buildings ... ..	7
Margaret's Buildings ... ..	8
North Parade Buildings ... ..	5
Oban Cottages, Odd Down Cottages. Odd Down Place and Terrace ... ..	26
Otago Terrace ... ..	34
Roebuck Place ... ..	7
Woodbine Cottages and Place ... ..	9

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In consequence of the pressure of other work it has not been possible to devote as much time to systematic house-to-house inspection work as one would desire, but frequent inspections have been made of the houses in the following localities :—Ambury, Back Street, Margaret's Passage, Milk Street, Peter Street, The Quay, Avon Street, and the Courts in Widcombe.

## Sanitary Condition of Workshops.

The Sanitary condition, etc., of the Workshops, Workplaces and Outworker's premises are matters placed by the Factory and Workshops Act under the control of the Local Sanitary Authority. The administration of the Act as regards factories, is under the Government Factory Inspector, and any defects or deficiencies in the sanitary accommodation, etc., noticed by him, are reported to the Local Authority and remedied under the Public Health Acts. Two such notices were received from H.M. Inspector of Factories during the year calling attention to the following defects :—

One factory not having separate approaches to W.C.'s. for males and females. One factory without a ventilated lobby between W.C. and workroom. Seven notices of occupation of new workshops were also received.

The number of workshops on the Register, 428, is a decrease on the preceding year. This decrease is accounted for by the removals during the year which numbered 136. Most of these were small businesses and in many cases provided employment for only one or two workers. The majority of these employers have been followed to their new premises, but as they were not employing any workers they have not been re-entered on the Register.

**CLEANLINESS.** Seventeen workshops or workplaces were found to require cleansing and limewashing. In each case the work was satisfactorily completed after notice had been served upon the owner or occupier.

**OVERCROWDING.** One workroom was found to be overcrowded, this was abated by the employer taking larger premises.

**VENTILATION.** In the 10 workrooms which were insufficiently ventilated none of the windows opened at the top. In each case the upper sashes have been made to open whereby efficient ventilation may be obtained, that is, if the occupiers will only make use of the means provided; but too frequently all ventilators are kept closed and even "permanent" ventilating openings are often carefully pasted over with paper.

**SANITARY CONVENIENCES.** Two workshops were found to have insufficient W.C. accommodation; 21 had unsuitable or defective W.C. appliances, and in one instance the W.C.'s in a factory employing both males and females, were close together and without separate approaches. Suitable accommodation was provided where necessary, and the defective W.C.'s. have been put into good condition.

Other nuisances were caused by defective drains, waste pipes, leaky roofs, and minor matters. In many instances these were remedied on verbal notice being given; in others written notices were served, but in no case was it necessary to institute legal proceedings.

**HOMEWORK.** Lists containing the names and addresses of 331 homeworkers were received from 38 firms, and 141 visits were paid to the homes in which the work is carried on. In the majority of cases the houses were found in a cleanly and satisfactory condition. The homeworkers are chiefly employed in making or altering wearing apparel, 325 being engaged as tailors, dressmakers, corset makers, plain sewing and underclothing, etc., 5 in the upholstering trade, 2 umbrella makers, and 1 paper bag maker. No notices were sent prohibiting homework in unwholesome premises, and no cases of infectious disease were notified in homeworkers' premises during 1908.

## Factories, Workshops and Homework.

1.—INSPECTION (including inspections made by Sanitary Inspectors or Inspectors of Nuisances).

Premises.	Inspections.	Number of Written Notices.
Factories (including Factory Laundries) ..	21	8
Workshops (including Workshop Laundries) ..	371	33
Workplaces .. .. .	154	18
Total .. .. .	546	59

## 2.—DEFECTS FOUND.

<i>Nuisances under the Public Health Acts :—</i>			Number of Defects	
Particulars.			Found.	Remedied.
Want of Cleanliness	..	..	17	.. all
„ Ventilation	..	..	10	.. „
Overcrowding	..	..	1	.. „
Other Nuisances	..	..	39	.. „
Sanitary accommodation	{	insufficient	2	.. „
		unsuitable or defective	21	.. „
		not separate for sexes	1	.. „
Total			.. 91	.. 91

### 3.—OTHER MATTERS.

		Number
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts but not under the Factory Act (s. 5)	Notified by H.M. Inspector	2
	Reports (of action taken) sent to H.M. Inspectors	.. 2

*Underground Bakehouses* (s. 101):—In use at the end of the year .. 16

<i>Homework : List of Outworkers' (s. 107:)—</i>			<b>Lists.</b>	<b>Outworkers.</b>	
Lists received—Wearing Apparel	..	..	64	..	552
Addresses of } forwarded to other Councils	..	..	..	47	..
Outworks } received from other Councils	..	..	..	15	..
Furniture and Upholstery	..	..	1	..	5
Paper Bags and Boxes	..	..	1	..	1
Umbrellas, &c.	..	..	1	..	2
Total			67	62	560

Notices served on Occupiers as to sending Lists 118

<i>Inspection of Outworkers' Premises:—</i>	Instances.	Notices served.
In Unhealthy premises (s. 108) ..	13	13
Number of Inspections of Outworkers' Premises ..	..	.. 141

*Workshops on the Register* (s. 131) at the end of the year:—

Total at end of 1907	..	..	..	..	447
Discontinued in 1908	..	..	..	..	113
					<hr/>
Added to Registrar in 1908		..	..	..	334
					94
					<hr/>
Total number of Workshops on Register				..	428

## Factory and Workshops Acts, 1901.

At the close of the year there were 428 Workshops on the Register classified as follows:—

			Brought forward ..	340
CLOTHING, &c:—			CONVEYANCES, etc.:—	
Milliners ..	..	34	Wheelwrights and Coach-builders ..	10
Tailors ..	..	63	Coach Painters ..	2
Boots, &c. ..	..	26	Saddlery ..	4
Underclothing ..	..	3	Black and Whitesmiths ..	9
Furrier ..	..	2	Cycle Repairs ..	4
Corset Makers ..	..	3		
Dress ..	..	105		
		236		—29
FOOD AND DRINK:—			JEWELLERY, &c.:—	
Bakers and Confectioners ..	..	23	Watch Repairing ..	11
Sugar Boiling ..	..	3	Jewellers ..	1
Beer Bottling ..	..	2	Engravers ..	1
Sausage Works ..	..	1		
Flour Packing ..	..	1		
Mineral Waters ..	..	1		
		31		—13
BUILDING TRADES:—			LAUNDRIES & DYERS:—	
Builders ..	..	6	Hand Laundries ..	12
Builders' Merchant ..	..	1	Dyers ..	2
Carpenters ..	..	7		
Painter ..	..	1		
Plumbers, &c. ..	..	8		
Brick and Pottery Works ..	..	2		
		25		—14
ENGINEERING:—			PRINTING &c.:—	
Engineering Works ..	..	10	Letterpress Printing ..	8
Ironfounder ..	..	1	Bookbinding ..	6
Surgeons' Mechanics ..	..	2		
		13		—14
FURNITURE, &c.:—			OTHER TRADES:—	
Cabinet Making & Upholstery	15		Cooper, &c. ..	2
French Polisher ..	..	1	Basket Maker ..	2
Wood Turner ..	..	6	Firewood ..	1
Carver and Gilder ..	..	5	Cork Cutter ..	1
Picture Framers ..	..	5	Cutler ..	1
Trunk Maker ..	..	3	Scale Makers ..	1
			Tinsmith ..	1
			Umbrella Makers ..	4
			Leather Currier ..	1
			Wall-paper making ..	1
			Provender and Corn Mills..	3
		35		—18
Forward ..	..	340	Total ..	428



## Canal Boats Acts, 1877 and 1884.

I have to report that during the year 1908 I made 106 Inspections of Canal Boats as compared with 108 in the preceding year. Several of the boats which are registered as canal boats and were formerly used as dwellings are now used as "open" or cargo boats only and not as cabin boats. The number of people dwelling in the boats appears to be decreasing each year. The Local Government Board Inspector under the Canal Boats Acts estimates that "if all canal boats now not used as dwellings were taken off the Registers, the total number remaining would be about half the present number recorded"; that is 6,250 instead of 12,500.

It is now very unusual to find families living on board, The limited capacity renders canal boats unsuitable for women and children, and the women, probably feeling that the employment is not suitable for them and that cabin homes are not proper places for bringing up young children, are leaving the boats and making their homes on land. During the past year I only found women or children present on three boats and in these cases the boat was not their regular home.

The condition of the boats passing through the district was generally satisfactory. Many are getting old and are in constant need of repair (one rarely sees a new boat), but on the whole the Acts and Regulations are observed by the boatmen and their standard of cleanliness and comfort is much higher than it was some years ago. It is now the exception to meet with a really dirty or dilapidated boat or to find one overcrowded or improperly occupied.

I have never been refused admittance to any boat nor obstructed in carrying out my duties at any time. There has been no friction or unpleasantness, and any suggestions I have made have always been received in a friendly spirit.

The condition of the boats and their occupants as regards the matters dealt with in the Acts and Regulations was as follows :—

95 boats were found satisfactory.

The infringements were :—

- 1 certificate not identifying boat with owner.
- 2 failing to produce certificate when required.
- 4 improper or defective marking.
- 3 pumps out of order.
- 2 cabins required cleansing.
- 2 „ „ re-painting.
- 5 „ „ repairing (floor or roof, etc.).
- 1 cabin had insufficient or improper ventilation.
- 1 boat required general repairs.
- 2 boats required re-painting.
- 3 water vessels (dirty or unsuitable).

With regard to other matters upon which the Local Government Board desire information :—There was no notification of any infectious disease received during the year, nor was it necessary to detain any boat for cleansing or disinfection.

No new boat was registered, but in one case re-registration was necessary in consequence of structural alterations having been made.

It was not necessary to take legal proceedings in respect of any of the infringements I have referred to. The defects were invariably remedied as soon as possible after being pointed out to the responsible persons.

Mr. Llewellyn, H.M. Inspector of Canal Boats, made his official visits in April and October, and appeared satisfied with the manner in which the Acts are administered and the work of inspection is carried out.

W. A. CRAVEN,  
Inspector.

## Bath Medical Institutions for In-Patients.

**Bath Statutory Hospital** for Infectious Diseases, Claverton Down. Situated in Rural District, but owned and administered by City Council. Accommodation for **81** Patients in **15** separate rooms or wards.

**Bath Union Workhouse Infirmary**, Odd Down, within the City, Guardians. Infirmary has **200** beds, **20** of which are available for Consumptives.

The General or **Royal Mineral Water Hospital**, owned by Trustees. Accommodation for **150** patients coming from outside Districts only.

**Bath Royal United Hospital**, Bean Street, Bath. Owners, Trustees. Accommodation for **130** patients from City and Neighbourhood.

**Bath Homœopathic Hospital**, Lansdown Grove. Owners, Trustees. Accommodation for **55** patients, some being private patients.

**Bellott's Hospital**, Beau Street. Owners, the Charity Trustees. Accommodation for **10** poor persons seeking the benefit of the Bath Waters.

**Winsley Sanatorium** for Consumptives. Owners, Trustees for Subscribers. Accommodation for **68** patients from Wilts, Somerset and Gloucestershire. Bath City Council own **2** beds, Bristol City Council 20 beds.

## Medical Institutions for Out-Patients Only.

**Eastern Dispensary**, Cleveland Place East. Owned by Committee. Providing attendance for patients residing within the Parishes of Walcot, St. Swithin, St. Stephen, St. Saviour and Bathwick, and affording medical and surgical aid to persons residing in or near Bath.

**Western Dispensary**, 1, Albion Place, Upper Bristol Road. Owners, Committee. For patients residing in the Parishes of Weston, Trinity and part of S. Paul.

**Southern Dispensary**, Claverton Street, Widcombe. Owners, Committee. For the Parishes of Lyncombe and Widcombe and Combe Down.

**Bath Eye Infirmary**, 1, Belvedere, Bath. Owners, Committee

**Bath Ear and Eye Infirmary**, Walcot Terrace, Bath. Owners, Committee.

There are also several **Private Nursing Homes** and **Dispensaries**.

## Winsley Sanatorium.

Since the Sanatorium was opened in December, 1904, nearly eight hundred patients have been admitted, the exact figure to the end of 1908 being 795. During these four years thirty patients have occupied the beds maintained by the City of Bath, and one more has been admitted during January, 1909.

The following is the classification of cases adopted by the Medical Board of the Sanatorium.

CLASS I.—“Good Cases.” Full working capacity may be restored without much fear of relapse if reasonable care is taken.

CLASS II.—“Hopeful Cases.” A good chance of regaining working capacity exists, although not, perhaps, in four months treatment.

CLASS III.—“Some Benefit may be Expected.” Cases of long standing and with much lung affected, improvement more or less lasting according to the life led. Will only be fit for very easy light work under favourable conditions.

CLASS IV.—“Unsuitable Cases ”

According to the above method the Bath cases have been classified as follows :

Year of Admission.	Class I.	Class II.	Class III.	Class IV.	Total
1905	...	1	6	...	7
1906	2	1	4	...	7
1907	...	5	2	...	7
1908	2	3	3	1	9
	<hr/> 4	<hr/> 10	<hr/> 15	<hr/> 1	<hr/> 30

With the exception of the one Class IV. case, who was only admitted for a month, and died a few weeks after leaving, all the above patients made some improvement in health. But the immediate results of treatment are of very little real value, as practically all patients admitted to a Sanatorium derive benefit from the fresh air, good food, and regular hours and habits. Even advanced cases find their cough diminished, their appetite and digestion improved, and they sleep much better, night sweats being almost unknown. The duration of the improvement made depends, however, on the

extent and stage of the disease. Advanced cases may be improved, and may be restored to work for a time, but sooner or later they are sure to relapse, unless they can live in exceptionally favourable circumstances.

Early cases have every prospect of being restored to full working capacity, and of their improvement being permanent, provided they have sufficient patience and perseverance to conscientiously carry out instructions given them during their stay in the Sanatorium, and to lead healthy and sober lives after.

#### AFTER HISTORY OF BATH PATIENTS.

Table I. records the after history of patients, as suggested by Dr. Timbrell Bulstrode in his Report on Sanitoria for Consumption.

Table II. deals with the same patients in more detail, and shows that the early cases are more frequently restored to full working capacity than the advanced ones.

TABLE I.

Year of Discharge.	Number of Patients.	Number of Patients (a) alive, (b) at full work, in January in each of the undermentioned years.			
		1908.		1909.	
		(a)	(b)	(a)	(b)
1905	6	2	1	2	1
1906	6	4	4	4	3
1907	7	6	4	6	4

TABLE II.

Year of Discharge.	Number of Cases.	Class.	January, 1908				January, 1909			
			Alive.	Full work	Some work	No work	Alive.	Full work	Some work	No work
1905	6	I. ..	..	..	..	..	..	..	..	..
		II. ..	..	..	..	..	..	..	..	..
		III. 6	2	1	1	..	2	1	1	..
1906	6	I. ..	..	..	..	..	..	..	..	..
		II. 2	2	2	..	..	2	2	..	..
		III. 4	2	2	..	..	2	1	1	..
1907	7	I. 2	2	2	..	..	2	2	..	..
		II. 4	4	2	2	..	4	2	1	1
		III. 1	..	..	..	..	..	..	..	..



## Methods of dealing with Infectious Disease. The Statutory Hospital.

The history of the Statutory Hospital has been dealt with in the Reports for 1900, page 17 ; 1901, page 33 ; 1902, page 19 ; 1903, page 17 ; 1905, page 26 and 1906, page 21. In the first of these the cases treated from 1876 to 1900 were tabulated, and in the last the total costs were stated. Bringing these figures up to the end of 1908 the record is : City patients 2,926, Rural patients 824. Total costs £45,871, contributed by Rural Districts, £4,700. The Rural Districts have sent 28 per cent of the patients, but have only contributed 10 per cent of the costs.

During the past seven years considerable improvements have been made at the hospital, and I consider it now fairly meets the requirements of the City and surrounding district, but, as pointed out in my Report for 1905, a separate small administrative block, and two observation wards, near the Berthon tents, would enable us to deal with a few cases of small pox without disorganising general work.

The accommodation at the hospital is now as follows :

Administrative block. For Matron and seven nurses.

Stone Building. Four private wards, each having 2 beds.

Pavilions.	No. 1.	Males, 16 beds.
	No. 1a.	Females, 15 beds.
	No. 2.	Accommodation for 7 wardmaids.
	No. 2.	9 beds.
	No. 3a.	2 beds.
	No. 3b.	1 bed.
	No. 4.	10 beds.
	No. 4a.	9 beds.
	No. 5.	2 beds.
	No. 6.	3 beds.

“ Berthon's Tents.” No. 1. 3 beds. No. 2. 3 beds.

Total accommodation for 81 patients, in 15 separate wards.  
Staff : —Matron, 7 Nurses, 7 Servants and a Porter.

Extra Buildings : —Laundry and drying-rooms. Disinfecting House with Washington Lyon Steam Disinfector. Mortuary. Ambulance house and Porter's Lodge.

Patients who are permanent residents in the City of Bath, or servants of such persons, are treated in the ordinary wards free of charge, or in private wards at £2 2s. per week.

Disinfection is also free of charge for notified cases.

A Brougham Ambulance, a second Washington Lyon Steam Disinfector and two Conveyances for infected clothing, complete our equipment for work in the City.

**WEEKLY NOTIFICATION OF INFECTIOUS DISEASES  
FOR THE YEAR 1908.**

WEEK.			Cerebro Spinal Fever	Scarlet Fever.	Diphtheria.	Typhoid. Fever.	Chicken Pox.	Puerperal Fever.	Erysipelas.	Total.
No	Date of Ending.									
1	January	4	—	2	—	—	1	—	2	5
2		11	—	2	—	—	1	—	—	3
3		18	—	—	1	—	1	—	—	2
4		25	—	—	3	1	3	—	2	9
5	February	1	—	2	—	—	3	—	1	6
6		8	—	—	—	—	3	—	1	4
7		15	—	—	—	—	6	—	—	6
8		22	—	—	—	—	1	—	—	1
9		29	—	1	—	—	4	—	—	5
10	March	7	—	—	—	—	2	—	1	3
11		14	—	—	1	—	4	—	—	5
12		21	—	—	—	—	2	—	1	3
13		28	—	—	—	—	1	—	—	1
14	April	6	—	—	—	—	—	—	—	—
15		11	—	2	—	—	3	—	1	6
16		18	—	2	1	—	—	—	—	3
17		25	—	1	—	1	4	—	—	6
18	May	2	—	—	—	—	—	—	1	1
19		9	—	5	1	1	2	—	—	9
20		16	—	1	2	1	1	—	—	5
21		23	1	2	1	—	1	—	3	8
22		30	—	—	—	—	—	—	1	1
23	June	6	—	2	1	—	1	—	—	4
24		13	—	3	—	—	—	—	—	3
25		20	—	1	—	—	—	—	—	1
26		27	—	—	1	—	—	—	—	1
27	July	4	—	—	—	—	1	—	—	1
28		11	—	2	1	—	5	—	1	9
29		18	—	1	1	—	1	—	1	4
30		25	—	5	—	—	1	—	—	6
31	August	1	—	3	1	—	1	—	—	5
32		8	—	3	—	—	1	—	1	5
33		15	—	—	—	—	—	—	3	3
34		22	—	1	—	—	—	—	—	1
35		29	—	1	1	—	—	—	1	3
36	September	5	—	—	—	—	1	—	—	1
37		12	—	1	1	—	—	—	1	3
38		19	—	3	1	—	—	—	1	5
39		26	—	3	1	1	1	—	—	6
40	October	3	—	—	—	1	1	—	1	3
41		10	1	2	—	—	2	—	—	5
42		17	—	1	—	—	2	—	2	5
43		24	—	1	1	—	3	—	—	5
44		31	—	—	—	—	—	—	—	—
45	November		—	—	—	—	2	—	—	2
46		14	—	—	4	—	—	2	2	8
47		21	—	—	—	—	3	1	1	5
48		28	—	—	—	—	3	—	—	3
49	December	5	—	1	2	1	2	—	1	7
50		12	—	2	1	—	3	—	1	7
51		19	—	1	—	—	3	—	—	4
52		26	—	—	—	—	—	—	—	—
53	January	2	—	—	1	—	2	—	3	6
Totals			2	57	28	7	82	3	34	213

# CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR, 1908. COUNTY BOROUGH OF BATH.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.										TOTAL CASES NOTIFIED IN EACH LOCALITY.						No of Cases Removed to Hospital FROM EACH LOCALITY.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
	At all Ages.		At Ages—Years.								BATH.			WALCOT.			LYN. & WID.			BATHWICK.			BATH.			WALCOT.			LYN. & WID.			BATHWICK.			BATH.			OUTSIDE DISTRICTS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.	M. F.

City Isolation Hospital—STATUTORY HOSPITAL, CLAVERTON DOWN, BATH RURAL DISTRICT

Distant 2½ miles from Guildhall. Situation—N. Latitude 51° 21' 52", West Longitude 2° 19' 10" Elevation—520 feet above sea level.

NOTES.—The localities adopted for this Table are the same as those in Tables on pages 24 to 26. (W.) The locality in which a workhouse is situated.

## The Water Supply.

In the Report for 1896 I published a detailed account of the Bath Waterworks contributed by Mr. C. Gilby, C.E., who was then Assistant Engineer of Bath. In 1899 the Special Sanitary Commissioner of the *Lancet* made an inspection of the sources of supply, and the results obtained by the *Lancet's* Laboratory Commissioners were printed in my Report for 1900 and following Reports, various analyses have been made from time to time, and an eminent Engineer is now engaged in making an inspection of all sources to see that proper precautions are taken against all future chances of pollution. The following Report by Mr. F. W. Stoddart, F.I.C., of Bristol, on samples collected January 6th and February 8th, 1909. shows that the water at present supplied is chemically and bacteriologically pure :—

Gentlemen,—I herewith beg to hand you the detailed results of chemical and bacteriological analyses of five samples of water collected and handed to Mr. J. W. Gatehouse, F.I.C. The samples were described as taken from the following sources :—No. 1, Monkswood straining well; No. 2, straining well, delivery well, Oakford; No. 3, Batheaston straining well; No. 4, Batheaston little tank; No. 5, Cherry well, Batheaston. These samples were very similar in composition, disclosing the normal features of water derived from the oolite, and differing among themselves no more than may be frequently observed in water from the same source at different times. The waters are all of a very high degree of organic purity, yielding no infecations of pollution, either chemical or bacteriological, and collectively they constitute a perfectly satisfactory supply for a large centre of population.

The details of the various analyses were as follows :—

### MONKSWOOD STRAINING WELL.                      OAKFORD.

#### CHEMICAL ANALYSIS.

		Grains per gallon.		Grains per gallon.
Saline ammonia	..	·0007	..	·0003
Albuminoid ammonia	..	·0050	..	·0011
Nitrogen as nitrate	..	·09	..	·086
Nitrites	..	—	..	—
Oxygen absorbed in four hours at 80 F.	..	·018	..	·003
Chlorine as chloride	..	1·20	..	1·20
Total dissolved solids	..	23·0	..	29·0
Earthy carbonates	..	13·0	..	16·5
Earthy salts other than carbonates	..	3·5	..	4·0
Hardness	..	17·5	..	21·5
Poisonous metals	..	—	..	—
Sediment	considerable mineral debris	..	..	—

#### BACTERIOLOGICAL ANALYSIS.

#### OAKFORD.

Organisms on gelatine plate at 22 C.—186 per C.C.	..	108 per C.C.
Ditto liquefying—17	..	4
Bacillus coli—absent from 50 C.C.	..	absent from 50 C.C.
B. Enteritidis Sporogenes—absent from 250 C.C.	..	absent from 250 to C.C.
Streptococcus—absent	..	absent.

# BATHEASTON.—CHEMICAL ANALYSIS.

	STRAINING WELL.	LITTLE TANK.	CHERRY WELL.
	Grains per gallon.	Grains per gallon.	Grains per gallon.
Saline ammonia	.. '0017	.. '0008	.. '0007
Aluminoid ammonia	.. '0023	.. '0019	.. '0019
Nitrogen as nitrate	.. '18	.. '15	.. '17
Nitrites	.. —	.. —	.. —
Oxygen absorbed in 4 hours at 80 F.	.. '014	.. '012	.. '005
Chlorine as chloride	.. 1'20	.. 1'20	.. 1'20
Total dissolved solids	.. 22'0	.. 23'0	.. 28'0
Earthy carbonates	.. 14'0	.. 15'5	.. 16'0
Earthy salts other than carbonates	.. 2'5	.. 3'0	.. 3'0
Hardness	.. 17'5	.. 19'5	.. 20'0
Poisonous metals	.. —	.. —	.. —
Sediment	.. considerable mineral and vegetable debris.	..	.. little

## BACTERIOLOGICAL ANALYSIS.

	STRAINING WELL.	LITTLE TANK.	CHERRY WELL.
Organisms on gelatine plate at 22 C.—112 per C.C.	..	.. 259 per C.C.	.. 49 per C.C.
Ditto liquefying—5.	..	.. 21.	.. 2.
Bacillus coli—absent from 50 C.C.	..	.. absent from 50 C.C.	.. absent from 50 C.C.
B. Enteritidis Sporogenes—absent from 250 C.C.	..	.. absent from 250 C.C.	.. present in 250 C.C.
Streptococcus—absent.	..	.. absent.	.. absent.



## Dairies, Cowsheds and Milkshops.

At the close of 1908 there were 71 registered dairymen and purveyors of milk and 8 registered cow keepers in the city. The number of dairymen is 3 more than in the previous year, but the number of cowkeepers remains the same. Eleven persons made application to be registered as dairymen, and after their premises had been inspected and any sanitary amendments required had been carried out, they were placed on the register. Eight dairy businesses were discontinued during the year. Two unregistered persons were found selling milk in general shops, these were cautioned and they have ceased selling ; 418 Inspections of Milkshops and Cowsheds were made, and the usual supervision as to cleanliness, etc., given to premises and utensils. I venture to state that the standard of cleanliness has advanced, but there is still ample room for improvement. Of the 71 dairies in the city, 5 are in connection with private houses, the milk being taken out on a "round," and 66 are shops in which milk is retailed over the counter ; of the latter number, 39 are shops in which the sale of dairy produce is the principal business, 26 are greengrocers, grocers or general provision shops, 4 are confectioners and 2 are refreshment rooms. In many cases milk is sold in small shops where all sorts of commodities are exposed for sale, and although we do all we can to discourage this practice there seems to be a tendency to increase this undesirable class of shop. Fortunately, the quantity of milk sold is very small, varying from a quart to two gallons per day, and it is not stored for any length of time in the shop, but is generally very soon disposed of. No doubt these shops are a convenience to the people in the neighbourhood in which they are situated, but milk sold under such conditions, frequently in open vessels and exposed to the dust and contamination of the average small shop, cannot be regarded as satisfactory. At present, milk may be sold in connection with any other business provided the premises are in a sanitary condition and the regulations are complied with. More stringent legislation is required to prevent this, or a regulation such as some towns have recently obtained and which has been approved by the Local Government Board, would be useful. The regulation referred to sets forth that milk

intended for sale shall not be deposited or kept "in any shop, "room, cellar, place or building or part of a building, where by "reason of its use for the sale or storage of fish, petroleum, "paraffin or greengrocery, or other commodity having an offensive "odour or otherwise such milk would be liable to become infected "or contaminated by impure air or by any offensive, noxious or "deleterious gas or substance or by any offensive, noxious or "injurious emanation, exhalation or effluvium." Until we have a similar regulation we have no alternative but to register persons who make application; we can only do our best to dissuade them.

There has been very little done during the past year to improve the cowsheds within the City area. Some were altered and improved a few years ago, but the power we possess to enforce further improvements is somewhat limited. In one or two the ventilation of the sheds is not as good as one would wish, and where ventilators are provided they are too often kept closed; the only way to overcome this practice is to insist upon large openings and in such positions that they cannot be closed by ordinary means. I hope to enforce inlet and outlet ventilating openings of at least one square foot per cow in every shed.

The yards immediately in front or adjoining the cowsheds are either unpaved or very improperly paved and cannot be kept clean. In every case these should be paved with hard, durable and impervious material and properly drained.

It is a common practice to deposit the manure within a few feet of the sheds and there allow it to remain for a more or less lengthy period, frequently until the accumulation becomes a nuisance. Unfortunately under our present regulations, which were restricted by the Local Government Board, we cannot compel the removal of all dung to any specified distance from the shed.

I am afraid there has not been much advancement in the matter of grooming the cows. Complaints are often received of dirty milk and on several occasions this has been proved to be due to the dirty condition of the cows or milkers or both. Such complaints would be less frequent if the farmers and their men exercised a little extra care in washing their hands and cleansing the udders of the cows before milking.

Too little attention is paid to securing clean milk. Many of the farmers imagine that the process of straining is sufficient to remove all the offensive suspended matter which is too frequently found in milk in varying quantities. If they realized the necessity not merely of having clean milk vessels, as required by the Regulations at present in force, but clean cows and clean milkers, there would be very few complaints of dirty milk. Clauses requiring the cleansing of cows, especially the hind quarters and udders, and precautions to be taken in regard to the milking should be definitely prescribed in any future Regulations. A regular examination of all dairy cows at stated intervals by a qualified veterinary surgeon would be advantageous, as this would ensure the exclusion from the herd of any animal not in perfect health.

The question of safeguarding the milk supply is one which has received, and is receiving, considerable attention. A Pure Milk Bill is being promoted for the City of London, and a Bill containing similar provisions whereby all Local Authorities would have the power to supervise the sources of the milk supplies outside the municipal area, would be a distinct advantage. The greater part of the milk consumed in Bath comes from outside districts, and there ought to be a more strict and efficient supervision of the milk supply at its source. Many towns possess the right of inspection, etc., of all farms which send milk into their area, and the result has been highly satisfactory. I am aware that such supervision outside the City area may be regarded as an interference, but unless the various Rural Sanitary Authorities put into force the powers they can obtain to safeguard the milk supply in their district, the necessity for such "interference" on the part of the Municipal Authorities is urgent and real. At present it is only after there is every reason to believe that some person in the district is suffering from an infectious disease attributable to milk that the Local Authority has power to examine the conditions existing at the place of the origin of the milk supply outside the district.

## Report of the Inspector under the Sale of Food and Drugs Acts.

During the year 207 samples were taken under the above Acts for the purpose of analysis by the Public Analyst :—

SAMPLE.	NUMBER ANALYSED.	GENUINE.	ADULTERATED.
Arrowroot	1	all	...
Baking Powder	1	...	...
Bread	1	...	...
Butter	56	...	...
Cheese	1	...	...
Coffee	7	...	...
Cornflour	2	...	...
Cream of Tartar	1	...	...
Golden Syrup	2	...	...
Honey	2	...	...
Jam	9	...	...
Lard	2	...	...
Lemon Curd	1	...	...
Lime Juice	1	...	...
Margarine	12	11	1
Milk	91	74	17
Mustard	3	all	...
Pepper	3	...	...
Sugar	9	...	...
Tartaric Acid	1	...	...
Vinegar	1	..	...
	207	189	18

The Public Analyst also reports that the following 15 samples were submitted to him by private persons :—

Butter	2	1	1
Food Preservative	5	all	...
Margarine	2	...	...
Milk	4	...	...
Sausage	2	...	...

Proceedings were taken in five cases as follows :—

DATE OF HEARING.	NO. OF SAMPLE.	ARTICLE	RESULT.
11th March, 1908	20	Milk	£3 and costs
14th April, 1908	45	"	£15 "
14th April, 1908	52	"	£15 "
20th November, 1908	163	"	10/- "
20th November, 1908	167	"	£5 "

Of the 91 samples of milk analysed, seventeen (or 18·7 per cent.) were certified as adulterated. Five contained added water varying from 2 to 50 per cent. ; five were deficient in fat, and seven had water added and were also deficient in fat. One sample was found to contain distinct traces of a preservative, and the Sanitary Committee authorized the issue of a circular warning dairymen that in the event of the Analyst reporting the presence of any preservative in milk the case should be regarded as one for the institution of proceedings under the Food and Drugs Acts. The issue of the circular was beneficial, as since July last none of the samples of milk have been found to contain preservative.

The percentage of adulterated milk samples is much higher than it has been for some four or five years. In many instances the adulteration was so slight that it was not thought advisable to institute proceedings against the vendors. In one case the dairyman attended before the General Purposes Committee and his explanation of the deficiency of fat in his sample was accepted. The possible causes of the variable quality of genuine milk are fully recognized, but the number and extent of the samples which fall below the standard of the Board of Agriculture lead one to believe that the variation is not due to the feeding or to the breed of the cow.

I have on many occasions proved the advantage of taking informal or "test" samples, as this method generally fixes the offence upon the proper person. I am also of the opinion that such samples afford a better indication of the amount of adulteration than is given by formal samples. The number of such samples taken last year was 61, of which 12 (or 19·7 per cent.) were reported as not genuine and 7 were of poor quality.

Several of the samples of butter contained 16 per cent. of moisture or thereabouts, and it is fairly evident that the manufacturers are working as nearly as possible to the standard of 16 per cent. allowed by the Board of Agriculture, although analysis cannot prove whether excess moisture is due to "faking" or not. A sample of margarine which was certified to contain 17·4 per cent. of moisture was reported to the Board of Agriculture, with the result that one of the Board's Inspectors visited the factory and took a series of samples.

The Butter and Margarine Act, 1907, which came into operation on January 1st, 1908, contains many useful provisions. Section 1. provides for the registration of butter factories, where



butter is blended or re-worked, and of premises where there are manufactured mixtures of butter with milk or cream. Three premises were registered during the year as "butter factories," and one for the wholesale dealing in "milk-blended butter." Other sections have reference to the inspection of factories and the taking of samples, and the limitation of moisture in butter, margarine and milk-blended butter. It also provides that margarine shall be described as "margarine" or by a name approved by the Board of Agriculture. About 3,000 fancy names were submitted to the Board before the Act came into operation, and over 1,000 of these have been approved.

The practice of selling margarine as butter or butter mixture is a common one in many districts, and I have found a few instances where it has been done in this city, but in each case, although the nature of the article was not disclosed at the time of purchase, the substance was wrapped in a properly marked "Margarine" wrapper, and thus the provisions of the Margarine Act were complied with. Under the recent Act what is known as "milk-blended butter" is treated as a new kind of margarine, and has now to be labelled with information as to the amount of moisture it contains, which must not exceed 24 per cent., and if sold under a fancy name, such name must be approved by the Board of Agriculture. I think it is unfortunate that the use of the word butter, even with "milk blended" prefixed, should be allowed to indicate anything except the genuine and pure article. The total prohibition of the use of the word butter in connection with any "mixture" or "substitute" seems to be the only way to put a stop to many pernicious practices.

Every year the administration of the Food and Drugs Acts becomes increasingly difficult. Adulteration is now almost a fine art, and the market is flooded with so called "preservatives" which are stated to defy discovery by any analyst. I think it would have been well if the recommendation of the Select Committee on the use of Preservatives, "that the presence of preservatives and the amount in any food substance should in all cases be declared," had been included in one of the numerous Acts. The public must be protected in regard to its food supply, and that protection cannot be more satisfactorily given than by making the tradesman state clearly what the article is that he is selling. If it is pure, all well and good, if it is not pure then the customer is entitled to be informed.



## Slaughter Houses.

There are 28 private slaughter houses in the City. Of these 26 are registered, having been established before 1847. Two are licensed, in one case the license is for the same term as the lease of the premises, and in the other it is triennial, so that in the latter case, if any serious nuisance is caused the license can be refused. 1024 inspections have been made both by day and night, and these visits have been timed to take place as nearly as possible during the time killing has been going on, in order to inspect the carcasses and organs of the animals slaughtered, but proper supervision is very difficult as the slaughter houses are situated considerable distances apart and killing goes on at all hours of the day and night. Three private slaughter houses have been acquired by the Corporation and the tenants have had notice to quit which expires in the early part of 1909. These slaughter houses were probably the worst situated of any in the City, and it is a satisfaction to be able to report that they will soon be things of the past. I would again draw attention to the condition of some of these premises and quote a paragraph from my last year's Report :—"Several of the older slaughter houses are becoming dilapidated, their structural condition leaves much to be desired, and the reconstruction of these premises on modern lines is a matter of urgency." I desire to emphasize this statement. Unless important alterations are carried out in many of them, the time is not far distant when their use as slaughter houses must be discontinued. Having regard to the situation of many of them, several being almost surrounded by dwelling houses, it is important that they should be as sanitarily perfect and as well equipped as possible. Arrangements have been made for a detailed inspection of, and report upon, all of them, and a schedule of requirements which will be insisted upon, will be issued at an early date. The standard of requirements in modern public abattoirs is higher to-day than it has ever been, and the standard in our private slaughter houses must be raised to as high a level as practicable.

A special report on this subject, by the late Inspector, was printed and issued to the Sanitary Committee in 1900. It is there stated that except in the case of four slaughter-houses "The walls are of rough masonry and limewashed, which makes proper cleansing very difficult, a good improvement would be effected if the walls were lined with white glazed bricks or rendered with cement to a height of not less than 6 ft. from the floor." Similar conditions exist to-day and although many superficial defects have been remedied, the structural defects are more serious and will involve considerable expenditure.

The bye-laws as to limewashing, cleansing, and the removal of garbage, offal and skins, have been generally well observed. Notices are sent periodically to every occupier of a slaughter house calling attention to the bye-law with respect to limewashing, etc. I have frequently been called by many of the butchers to examine carcasses which they thought were diseased or of a doubtful character, and have again to acknowledge the willingness with which they have surrendered, when necessary, such carcasses to be removed and destroyed. It was not necessary to apply for a magistrate's order to secure the destruction of the diseased meat in any instance.

The following is a list of meat and other food destroyed as being diseased, unsound, etc.

Beef. 4 forequarters (localised tuberculosis)

Pork. 1 ton, 15 cwt., 1 qr., 3 lbs.

Fish. 1 box mixed fish, 1 box whiting.

1 box haddock, 2 boxes smoked fillets of fish.

Game. 1 box mixed game, hares, pheasants, etc. (50 lbs.)

Other food. 29 tins of preserved peas.

In every case of a carcass being condemned, the organs were destroyed and in many cases where the organs only were affected, these were destroyed.

Many towns have obtained powers to close unsuitable slaughter-houses, but there is no uniformity of procedure, the powers possessed by different Local Authorities being exceedingly varied. Under the Public Health Acts, a licensed slaughter-house can be closed permanently after two convictions of the occupier for non-compliance with the bye-laws or for having sold unsound or diseased meat on the premises but the same does not apply to registered slaughter-houses, the latter term including all those which were in existence at the time of the application to the town or district of the Towns Improvement Acts, 1847, which Act applied to Bath. In respect to these, a closing order cannot be obtained unless two convictions are obtained against the owner or proprietor, and, as in the majority of the cases the owner or proprietor is not the occupier, it follows that, however many convictions may be obtained against the occupier, there is no power of closing a private slaughter-house. The whole question requires to be dealt with broadly, and to be made the subject of legislation which would, by a few simple enactments, remove the difficulties which at present exist.

W. A. CRAVEN,

*Chief Sanitary Inspector.*

## Summary of Sanitary Work done during the Year.

210	Nuisances from defective drains, soil pipes, etc., were abated.
217	„ „ „ W.C's. and urinals were abated.
127	„ „ „ waste pipes, rainwater pipes, and gullies were abated.
26	„ „ „ intercepting traps.
38	„ „ „ deficient ventilation were abated.
72	„ „ „ defective paving.
44	„ „ „ roofs, ceilings, etc.
10	„ „ „ cesspools.
22	„ „ „ water supply.
6	„ „ „ overcrowding.
119	„ „ „ accumulations of ashes, etc.
64	„ „ „ keeping pigs, fowls, etc.
57	„ „ „ various minor causes.
3	„ „ „ occupation of cellar dwelling.
4	„ „ in common lodging houses.
3	„ „ „ slaughter houses.
6	„ „ „ dairies.
59	„ „ „ factories, workshops, and work places were abated.
13	„ „ „ homework premises were abated.
1	„ „ was reported to Police.
26	Infringements of Canal Boats Acts were remedied.
104	Premises cleansed and limewashed.
11	Ashbins provided after notice.
74	Smoke observations were made.
64	Matters reported to Surveyor.
2	„ „ „ Waterworks Engineer.
546	Workshops and workplaces inspected.
141	Homework premises „
9	Workshops placed on register after inspection.
418	Inspections of dairies, cowsheds, food stores, etc.
399	„ „ „ common lodging houses.
1024	„ „ „ slaughter houses.
112	„ „ „ offensive trades premises.
106	„ „ „ canal boats.
207	Samples purchased for analysis under Food and Drugs Acts.
2	„ „ of water submitted for analysis, one of which was unfit for drinking purposes. A satisfactory supply has since been obtained.

## Recent Legislation.

The Education (Administrative Provisions) Act, 1907, has borne fruit abundantly. The 72 words of Section 13 have led to the Medical inspection of school children in all progressive districts. The work done under this Act in Bath is recorded in a separate report. Another Act, Children Act, 1908, is now proclaimed to be the "Children's Charter," but the Sections to be administered by the Sanitary Authority are for the most part merely complementary to medical inspection. Section 12 of Part II. will probably be extremely useful as neglect of medical advice may be punished by heavy fines or imprisonment. The Section is as follows :—

"12. *Punishment for Cruelty to Children and Young Persons.*—(1) If any person over the age of sixteen years, who has the custody, charge, or care of any child or young person, wilfully assaults, ill-treats, *neglects*, abandons, or exposes such child or young person, or causes or procures such child or young person to be assaulted, ill-treated, neglected, abandoned, or exposed, *in a manner likely to cause such child or young person unnecessary suffering or injury to his health* (including injury to or loss of sight, or hearing, or limb, or organ of the body, and any mental derangement), that person shall be guilty of a misdemeanour, and shall be liable—

- (a) on conviction on indictment, to a fine not exceeding one hundred pounds, or alternatively, or in default of payment of such fine, or in addition thereto, to imprisonment with or without hard labour, for any term not exceeding two years; and
- (b) on summary conviction to a fine not exceeding twenty-five pounds, or alternatively, or in default of payment of such fine, or in addition thereto, to imprisonment, with or without hard labour, for any term not exceeding six months;

and for the purposes of this section a parent or other person legally liable to maintain a child or young person *shall be deemed to have neglected him in a manner likely to cause injury to his health if he fails to provide adequate food, clothing, medical aid, or lodging for the child or young person, or if, being unable otherwise to provide such food, clothing, medical aid or lodging he fails to take steps to procure the same under the Acts relating to the relief of the poor.*"

Section 122, relating to the cleansing of verminous children also gives much needed power to examine such children without the consent of the parent and to compel cleansing within twenty-four hours.

## Public Health (Tuberculosis) Regulations, 1908.

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*The Order will take effect on and after January 1st, 1909.*

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### **Notification by Medical Officers of Poor Law Institutions.**

Article IV. of the Order directs that the Medical Officer of a Poor Law Institution, as defined by Article I., shall within 48 hours after his first recognition of the symptoms of pulmonary tuberculosis in the case of a poor person who is an inmate of the institution, post to the Medical Officer of Health of the sanitary district in which the person resided immediately before he became an inmate of the Poor Law Institution a notification of the case.

### **Notification by District Medical Officers.**

Article V. directs that a similar notification shall be posted to the Medical Officer of Health by the District Medical Officer in the case of any poor person suffering from pulmonary tuberculosis on whom he is in medical attendance according to his agreement with a Board of Guardians.

The notification must be sent within 48 hours after the District Medical Officer has first recognised the symptoms of pulmonary tuberculosis, and must be addressed to the Medical Officer of Health acting for the sanitary district in which the residence of the poor person is situate.

### **Notification by Superintending Officers of Poor Law Institutions.**

Under Article VI. it will be the duty of the Superintending Officer of a Poor Law Institution to post to the Medical Officer of Health on a printed form as set out in the Schedule to the Order a notification of the actual or intended place of destination and address at that place of any person leaving the institution in respect of whom a notification has been made by the Medical Officer of the institution under Article IV.

The notification must be posted within 48 hours after the departure of the person to whom it relates, and must be sent to the Medical Officer of Health of the sanitary district in which the intended destination of the person is situate. The term "Superintending Officer" is defined in Article I. (*h*).



### **Notification of Changes of address by Relieving Officers.**

Article VII. provides that a Relieving Officer shall notify any change of address (other than by admission to a Poor Law Institution) of a person in respect of whom a notification has been made under Article V. by a District Medical Officer.

The notification must be made on a printed form as set out in the Schedule to the Order, and must be sent to the Medical Officer of Health for the sanitary district in which the address to which the person moves is situate.

The notification must be posted within 48 hours after the Relieving Officer has obtained accurate information respecting the change of residence.

### **Remuneration to be allowed.**

Provision is made by Article VIII. for the remuneration of the Officers who have to make notifications under the Order. In the case of the Medical Officer of a Poor Law Institution or a District Medical Officer, the remuneration will be at the rate of one shilling for every notification, but where in relation to any one case two or more notifications have been posted by the Medical Officer to the same Medical Officer of Health, his remuneration will be at the rate of sixpence for every such notification after the first.

In the case of a Superintending Officer of a Poor Law Institution or a Relieving Officer, the remuneration will be at the rate of threepence for every notification.

The remuneration will be payable by the Council of the sanitary district for which the Medical Officer of Health acts, it will be deemed to cover the cost of postage, and it will be payable in the manner and subject to the conditions prescribed by the Article.

Some modification of the above Order will probably be found necessary in dealing with those persons who use the Workhouse as an occasional place of residence for short periods. Already one patient has been reported as discharged from the Workhouse four times, while this Report has been in preparation, the dates of Notification being—January 20th, February 11th, March 9th, and April 1st, 1909.



## The Midwives Act, 1902.

The Midwives Act is administered by a Sub-Committee of the Sanitary Committee, and the Medical Officer of Health is the Inspector of Midwives.

Twenty-two certified midwives have given notice of their intention to practise in Bath, and have been duly registered, the number registered for the commencement of 1908 was 26, but we need have no fear of the supply of midwives failing in urban districts.

Fifteen of these midwives reside in the City, 7 live in adjoining parishes. Five of the City midwives and 1 rural midwife have passed a qualifying examination. Sixteen are registered as having been in practice before July, 1901.

The total number of live births registered in Bath during 1908 was 996, of these 584 or 58 per cent. were attended by midwives. The number of still-births notified was 47, viz. by midwives 23, by medical practitioners 15 and by other persons 9.

Medical aid was called for in 82 cases and it is noteworthy that the qualified midwives recognise danger and call for medical aid in a large proportion of their cases.

The 3 qualified midwives of the River Street Institute attended 285 live births and 12 still-births and called for medical aid in 54 cases, 18 per cent of their total.

Three certified midwives attended a total of 186 births and called for medical aid in 18 cases or 10 per cent. Four others attending 70 cases, only called for medical aid in 4 cases. Five who attended between them 30 cases called for medical aid 4 times. Nine midwives attended not more than 4 births during the year, a total of 24 cases between them, and called for medical aid only in 2 cases.

No case of misconduct was reported during the year, 1 woman resigned because of failing eyesight.

Our returns show that the infantile mortality among the infants attended by midwives was no greater than among the infants attended by medical men. The Health Visitor does not visit those cases attended by medical men but keeps under observation all cases attended by midwives.

There have been 4 deaths of women during the puerperum—  
 March 22, F.39, Hæmorrhage from a ruptured blood vessel. Inquest  
 April 22, F.20, Blood poisoning after childbirth, see page 45.  
 October 30, F.42, Placenta Prævia, Hæmorrhage, Certified.  
 November 16, F.34, Chronic Salpingitis, Pelvic Peritonitis, Certified

Neither of the two which should be classed as puerperal fever were notified as such.

The number of deaths among infants of residents was 79, the same number as for 1907, but as there were 53 weeks in the Registration Year, 1908, as compared with 52 in 1907, and 996 births as against 888 in 1908, the death rate will be lower whether calculated per 1,000 population or per 1,000 births.

Of the 79 infants 20 died during the first week and 35 during the first four weeks of life, the principal cause being premature birth. It is obvious that the prevention of these deaths lies more within the sphere of usefulness of the Babies' Welcome Society than within the means of usual routine work, our experience in trying to rear immature infants has been discouraging, no matter what pains may be taken, the infants generally die in a few months, prevention must be prenatal.

Considering the total returns of infant mortality for 9 years, of 919 deaths, 198 were during the first week of life and 323 during the first month. During the second month 96 died, and in the following months—79, 60, 46, 41, 49, 42, during the ninth month the mortality was 54, probably due to teething and change of food, during the last three months of the first year of life the total deaths were 46, 35, and 38 during the nine years.

The infantile mortality for 1908 in Bath was 79 per 1,000 births, for England and Wales it was 121, for the 76 Great Towns 128, for 142 Smaller Towns 124, for Rural England 110 per 1,000 births. The rate for Bath is the lowest we have ever recorded, for England in 1908 it was 3 per 1,000 above the rate of 1907.

The number of illegitimate births, 63, was considerably above the average, there were 9 deaths among these giving an infantile mortality of 143 per 1,000 illegitimate births.

## Vital Statistics.

MARRIAGES REGISTERED IN THE CITY OF BATH, 1906, 1907, 1908.

Quinquennial means 1891-5, 1896-1900, 1901-5.

Years.	Winter.	Spring.	Summer.	Autumn.	Year.	Rate per 1,000.
1891-1895	88	122	131	126	466	17·9
1896-1900	78	124	129	121	451	18·0
1901-1905	78	116	123	123	435	17·4
1906	74	119	124	106	423	16·9
1907	81	120	129	110	440	17·6
1908	102	104	109	118	433	17·4

### QUARTERLY RETURNS OF BIRTHS.

Births Registered.	Winter.	Spring.	Summer.	Autumn.	Year 1908.
Legitimate ...	230	246	243	214	933
Illegitimate ...	17	18	15	13	63
Total Births ...	247	264	258	227	996
Rate per 1,000 ...	19·8	21·1	20·6	18·2	19·5
English Rate do.	27·3	27·7	26·6	24·6	26·5

*Births Attended by  
Midwives.*

1906.

1907.

1908.

Age of Mother.	Number & Sex.		Number & Sex.		Number & Sex.		Perc. of Birth.
	Male.	Female	Male.	Female	Male.	Female	
17 to 20 years ...	6	4	6	8	4	4	1
20 „ 25 „ ...	62	61	63	42	66	65	22
25 „ 30 „ ...	58	82	98	73	111	86	33
30 „ 35 „ ...	61	65	80	77	77	52	21
35 „ 40 „ ...	41	51	41	48	46	46	15
40 „ 45 „ ...	25	19	18	14	25	19	7
45 and upwards	...	...	4	2	2	4	1
All ages ...	253	282	310	264	331	276	100

Total Births Apl. 1st to Dec. 31st, 1905, 709 ; 1906, 929 ;  
1907, 888 ; 1908, 906.

Percentage attended by Midwives, Apl. 1st to Dec. 31st, 1905, 53 ;  
1906, 58 ; 1907, 65 ; 1908, 58.

### VACCINATION RETURNS.

District.	Born.	1906.		Born.	1907.		Jan. to June 1908.		
		Vac.	Died.		Vac.	Died.	Born.	Vac.	Died.
Walcot	534	375	53	478	384	42	264	197	21
Lyncombe	348	268	28	316	297	26	221	169	8
Bathwick	48	35	5	50	35	5	27	15	2
Bath	940	678	86	844	716	73	512	381	31

### PRIMARY VACCINATION PER 1,000 SURVIVING INFANTS.

	1891.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Jan. to June 1908.
695	822	885	716	808	882	794	915	792		

## Parochial Population and Return of Dwelling Houses and other Buildings.

District.	Population 1901.		OCTOBER 1st, 1908.				Value Oct. 1st, 1901.
			Private Houses, Hotels & Shops.		Other Buildings.		
			Let.	Void.	Let.	Void.	
Bathwick ..	1,384	2,900	861	87	83	14	38,307
Lyn. & Wid. ..	6,512	7,860	3692	238	203	15	61,432
St. James'	1,801	2,512	604	30	133	2	25,241
St. Michael's ..	870	1,192	378	30	70	9	24,125
S. Peter & S. Paul	490	712	235	11	44	1	19,777
Walcot ..	9,075	14,516	4691	396	326	44	135,926
Bath ..	20,132	29,692	10461	792	857	85	304,808

## Births and Deaths registered during the year ended Jan. 2nd, 1909.

District.	BIRTHS.				DEATHS.			
	M.	F.	Persons.	Rate.	M.	F.	Persons.	Rate.
Walcot ..	294	261	555	17.5	190	19	384	15.7
Hospitals ..	—	—	—	—	67	51	118	—
Lyn. and Wid. ..	199	165	364	26.5	79	100	179	20.2
Workhouse ..	16	12	28	—	64	56	120	—
Bathwick ..	26	23	49	10.0	21	35	56	11.4
Bath ..	535	461	996	19.5	421	336	857	16.8

## Corrected Sub-District Mortality,

including three deaths at Statutory Hospital, and two outside Bath.

	LOCALITY OF DEATH.							Corrected Rates Net. Standard	
	Private House.		Hospital.		Workhouse.		Total Persons		
	Male	Female	Male	Female	Male	Female			
Walcot ..	181	190	22	19	40	38	490	15.4	13.8
Lyn. and Wid. .	80	97	16	7	9	12	221	14.9	13.4
Bathwick ..	21	34	1	1	1	—	58	11.8	10.6
Bath ..	282	321	39	27	50	50	769	15.1	13.7
Non-Municipal	8	9	30	26	14	6	93		

## Annual Death Rates per 1000 from all causes and from seven Zymotic Diseases. Year 1908.

	All causes.		Zymotic Diseases (Cls. 3-9.	Sma Pox.	Measles.	Scarlet Fever	Diphtheria	Whooping Cough	Fever.	Diarrhoea.	Deaths under 1 year per 1000 Births.
	Crude	corrected									
England and Wales ...	14.7	14.7	1.29	0.00	0.22	0.08	0.15	0.27	0.07	0.50	121
Bath ..	16.8	13.6	0.56	0.00	0.65	0.00	0.01	0.04	0.04	0.19	79
76 Great Towns ..	14.9	15.8	1.59	0.00	0.31	0.10	0.16	0.29	0.08	0.65	128
142 Other Large Towns	14.0	14.7	1.26	—	0.20	0.06	0.15	0.25	0.08	0.52	124
England and Wales, less the 218 towns ...	14.7	13.8	0.99	00.0	0.13	0.06	0.15	0.25	0.07	0.33	110

**Principal Causes of Death for each Quarter of the year 1908, compared with the mean of corresponding quarters of previous 5 years.**

	Winter.		Spring.		Summer.		Autumn.		Year	
	1908	5 years	1908	5 years	1908	5 years	1908	5 years	1908	5 years
Deaths from 7										
Principal Zymotics	11	13	27	8	9	10	5	9	52	42
Cancer & Sarcoma	21	16	8	14	16	16	22	16	67	62
Tubercular Phthisis	14	15	19	11	12	10	12	10	57	46
Other Tubercular ..	8	3	5	3	4	4	4	3	21	13
Apoplexy and Hemiplegia ..	18	12	15	13	4	8	15	13	52	45
Heart Disease ..	41	28	25	22	14	17	25	27	105	94
Bronchitis ..	33	29	10	11	1	6	14	19	58	65
Pneumonia ..	26	18	14	14	4	8	10	14	54	56
Influenza ..	13	9	4	2	1	—	—	1	18	16

**Deaths from all Causes at various ages each Quarter, and 5 years means.**

	Winter.		Spring.		Summer.		Autumn.		Year	
	1908	5 years	1908	5 years	1908	5 years	1908	5 years	1908	5 years
All ages ..	262	223	202	168	129	140	176	191	769	719
Under 1 year	22	28	24	19	17	24	16	24	79	95
1-5 ..	22	17	24	11	1	7	7	9	54	43
5-15 ..	3	4	6	4	10	5	4	4	23	16
15-25 ..	9	5	4	4	8	3	10	5	31	17
25-35 ..	16	11	10	7	4	6	9	8	39	32
35-60 ..	36	44	36	35	28	35	47	44	147	158
60-80 ..	99	77	67	62	44	45	56	57	266	251
80-over ..	55	37	31	25	17	14	27	30	130	107

**Infantile Mortality.**

1908.	Mean.	1907.	1906.	1905.	1904.	1903.	1902.	1901.	1900.	1899.	1898.
79	111	88	114	97	117	89	106	104	126	131	136

**Deaths from Preventable Diseases.**

	1908	Mean	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898
Diarrhœa ..	10	17	14	13	4	15	7	14	17	21	37	31
Measles ..	33	12	2	17	33	4	1	42	—	4	7	16
Whooping Cough	2	10	14	14	3	15	4	11	10	9	3	14
Scarlet Fever	—	1	1	3	—	—	2	—	3	3	—	—
Diphtheria ..	2	7	4	5	13	10	3	6	7	9	8	4
Typhoid ..	—	2	2	1	1	1	2	1	2	4	6	3
Small Pox ..	—	—	—	—	—	—	—	1	—	—	—	—
Phthisis ..	57	52	46	57	41	45	42	38	64	54	61	59
Other Tubercular	21	17	8	10	11	16	11	17	9	23	33	28
Influenza ..	18	23	19	23	12	10	14	22	13	28	58	33
Puerperal Fever..	—	1	—	1	4	1	—	—	—	2	1	2
Erysipelas ..	4	2	2	—	1	—	1	1	4	5	5	4

**Inquests, 1908.**

M.	F.	Persons.
41	34	75

**Uncertified Deaths.**

M.	F.	Persons.
—	3	3



# Vital Statistics of separate Localities in 1908 and previous years.

## COUNTY BOROUGH OF BATH.

NAMES OF LOCALITIES.	BATH. Population 50,000.						WALCOT. Population 31,200.						LYN-WIDCOMBE. Population 14,500.						BATHWICK. Population 4,300																	
	Births registered.			Deaths at all Ages.			Deaths under 1 year.			Deaths at all Ages.			Deaths under 1 year.			Deaths at all Ages.			Deaths under 1 year.			Deaths at all Ages.			Births registered.			Deaths at all Ages.			Deaths under 1 year.					
YEAR.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
1898	541	462	413	443	83	54	136	318	280	271	289	38	31	122	186	176	129	116	125	115	24	20	23	24	23	26	30	19	24	37	4	2	4	11	82	
1899	514	506	433	528	73	61	131	307	307	283	332	38	31	122	171	176	129	116	125	115	24	20	23	24	21	26	30	19	24	37	4	2	4	11	82	
1900	496	466	382	468	66	55	126	299	267	256	317	38	31	122	198	177	143	115	125	115	24	20	23	24	21	26	30	19	24	37	4	2	4	11	82	
1901	508	467	415	461	53	48	104	288	258	254	266	35	30	119	179	180	143	115	125	115	24	20	23	24	23	32	22	22	24	36	2	2	4	11	82	
1902	489	499	389	433	60	45	106	280	300	254	303	36	30	114	179	180	143	115	125	115	24	20	23	24	23	32	22	22	24	36	2	2	4	11	82	
1903	527	500	302	366	56	31	89	296	304	204	252	38	15	88	199	167	74	74	78	16	14	82	32	29	24	36	22	22	24	36	2	2	4	11	82	
1904	525	509	328	410	63	52	117	313	292	210	284	38	29	111	183	195	87	93	93	21	22	114	29	22	31	33	4	1	9	8	1	1	98	43		
1905	479	506	339	385	53	35	97	267	295	245	252	39	25	114	188	189	74	74	99	13	9	58	24	22	20	34	4	1	1	1	1	1	107	43		
1906	451	478	341	407	63	43	114	266	265	226	278	41	21	117	161	190	89	89	97	18	21	111	24	23	26	32	24	23	26	32	4	1	1	107	43	
1907	450	438	332	384	46	33	88	274	244	211	268	29	21	97	150	171	88	88	84	12	11	71	26	23	22	26	23	23	22	26	5	1	1	123	43	
Averages of Years 1898 to 1907.	495.0	453.1	367.4	428.5	61.6	45.7	110.8	290.8	281.2	241.4	284.1				181.5	177.9	102.1	110.5						257	240	22.2	34.0									
1908	535	461	373	396	54	25	79	294	261	245	245	36	13	88	215	177	105	116	15	11				66	26	23	23	35	3	1						

NOTES. — (a) Deaths of residents occurring in public institutions beyond the district are included in sub-column *c* of this table, and those of non-residents registered in public institutions in the district excluded.

(b) Deaths of residents occurring in public institutions, whether within or without the district, are allotted to the respective localities according to the addresses of the deceased.



# **Vital Statistics of Whole District during 1908 and Previous Years.**

## **COUNTY BOROUGH OF BATH.**

Year.	Population estimated to Middle of each Year.	Births.		Births per 1000 Married Women.	Total Deaths Registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-Residents Registered in Public Institutions in the District.	Deaths of Residents Registered in Public Institutions beyond the District.	Net deaths at all Ages belonging to the District.	
		Number.	Rate.*		Under 1 Year of Age.		At all Ages.					Number.	Rate.*
					Number.	Rate per 1,000 Births Registered.	Number.	Rate.*					
I	2	3	4		5	6	7	8	9	10	11	12	13
1898	50,400	1003	19.84	202	137	136	856	16.98	194	73	2	785	15.51
1899	50,200	1020	20.32	204	134	131	961	19.14	229	81	3	882	17.57
1900	50,000	962	19.14	192	121	126	933	18.66	193	89	6	850	17.00
1901	49,000	973	19.58	199	101	104	876	17.59	177	73	7	803	16.12
1902	49,800	988	19.40	202	105	106	911	17.93	223	70	2	822	16.48
1903	49,800	1027	20.62	208	92	89	751	15.08	135	57	2	668	13.41
1904	49,800	1034	20.76	209	121	117	826	16.58	212	75	8	738	14.82
1905	50,000	985	19.70	200	95	97	808	16.16	194	71	4	724	14.48
1906	50,000	929	18.58	188	110	114	824	16.60	169	71	4	748	14.96
1907	50,000	888	17.76	180	81	88	785	15.70	163	60	1	716	14.32
Aver. 1898-1907	49,900	980	19.57	198	109	111	853	17.04	189	72	4	773	15.46
1908	50,000	996	19.53	207	86	Tot 87 Res 79	857	16.81	164	93	5	769	15.09

\* Rates in Columns 4, 8, and 13 calculated per 1000 of estimated population.

NOTE—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, work-houses and lunatic asylums.

Area of district in acres (exclusive of area covered by water)	3,338	
Total population at all ages	49,839	} At Census of 1901.
Number of inhabited houses	9,317	
Average number of persons per house	5.3	

Causes of, and Ages at, Death during the Year ended January 2nd, 1909.

DEATHS IN LOCALITIES.

DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.

CAUSES.	Persons.		M	F.	— 1		5 to 10		15 to 20		25 to 35		45 to 55		60 to 75		80 to 85		85 & over		WALCOT.		TYN-WID.		BATH'W'K		On-Res.		Public Inst. Res.	
	M	F.			— 1		5 to 10		15 to 20		25 to 35		45 to 55		60 to 75		80 to 85		85 & over		WALCOT.		TYN-WID.		BATH'W'K		On-Res.			
					M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		M
2 Measles.	33	22	11	7	4	15	7	..	..	..	..	..	..	..	..	..	..	..	..	..	15	6	7	5	..	..	..	3	..	
3 Scarlet-fever	18	..	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	8	1	..	..	..	..	2	..	
5 Influenza	2	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	
6 Whooping-cough	2	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	
7 Diph. and M. Crp.	2	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	
9 Fever Enteric	8	5	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	..	..	..	..	..	..
11 Diarrhoea	2	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	
12 Zymotic Enter.	7	5	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	1	2	..	..	..	..	..	..
13 Enteritis	4	4	2	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..	..	..	..	..
15 Erysipelas	3	1	2	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..	..	..	..	..
16 Venereal	1	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	0	..	..	..	..	..	..	..	..
17 Other Septic	2	1	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	1	3	..	..	..	..	..	..
17a Rheumatic	11	4	7	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	1	3	..	..	..	..	..	..
18 Cerebro S. Fever	57	36	21	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24	10	10	9	..	..	..	..	..	..
19 Tuberc. men.	10	6	4	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	1	1	2	..	..	..	..	..	..
19a Tuberc. mesent	67	32	35	14	5	14	..	..	..	..	..	..	..	..	..	..	..	..	..	..	121	19	9	12	..	..	..	..	..	..
20 Phthisis	19	10	4	10	3	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	3	3	1	..	..	..	..	..	..
21 General tuber.	58	4	6	25	33	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	20	7	11	4	2	3	1	2	..
23 Cancer ..	14	10	4	10	3	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	3	3	1	1	1	1	1	1	..
24 Premature birth	4	4	6	4	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	14	2	2	3	3	1	1	1	1	..
25 Developmental	13	7	25	13	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	2	2	2	3	1	1	1	1	..
26 Old age ..	4	4	6	4	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	2	2	3	3	1	1	1	1	..
27 Meningitis	38	13	25	13	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	19	3	3	1	1	1	1	1	..
28a Apoplexy	14	4	10	4	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	2	3	3	1	1	1	1	..
28b Hemiplegia	14	4	10	4	10	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	2	3	3	1	1	1	1	..
28c Spinal ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	2	3	3	1	1	1	1	..



## Infantile Mortality during the Year 1908.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under 1 Year.
All causes	Certified ..	20	6	5	4	35	4	3	4	1	4	4	4	8	3	5	4	79
	Uncertified ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Common Infectious Diseases.	Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Chicken-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Measles ..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	3	3	11
	Scarlet Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Diphtheria: Croup ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Whooping Cough ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
	Diarrhoea, all forms ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
	Enteritis ..	..	..	1	..	1	..	1	..	..	..	..	..	2	..	1	..	5
	(not Tuberculous) }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Gastritis, Gastro-intestinal Catarrh }	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	2
Wasting Diseases.	Premature Birth ..	14	2	1	1	18	1	..	..	..	..	..	..	..	..	..	..	19
	Congenital Defects ..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
	Injury at Birth ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Want of Breast-milk ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Atrophy Debility, Marasmus }	4	3	2	..	9	1	1	..	1	..	..	..	..	..	..	..	12
Tuberculous Diseases.	Tuberculous Meningitis ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
	Peritonitis: ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tabes Mesenterica ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other Tuberculous Diseases }	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
	Erysipelas ..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
	Syphilis ..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	2
	Rickets ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Meningitis (not Tuberculous) }	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1
	Convulsions ..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	2
	Bronchitis ..	..	..	..	1	1	1	1	2	..	3	1	..	..	3	2	1	15
	Laryngitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Pneumonia ..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	2
	Suffocation, overlaying ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Other causes ..	..	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	2

Population, estimated to middle of 1907, 50,000.

Births { legitimate .. 934  
          illegitimate .. 63

Deaths { legitimate infants .. 70  
          illegitimate .. 9

Deaths from all Causes at all Ages :—Residents, 769 ; Non-Residents, 93.



## Special Causes of Death.

The total number of deaths during the year was considerably above the average of five preceding years and requires special comment. The Registration Year had 53 weeks and the last Quarter 14 weeks, due allowance is made for the extra week in calculating all the rates, but the numbers of births and deaths are respectively 18 and 14 above the number registered during the Calendar Year. All deaths are recorded as deaths of Residents unless we have definite information that the person who died was brought to Bath for treatment during the illness which caused death, or that the person had been recently admitted to a public institution from another district where the death would be recorded as belonging to that district. We must also remember we have no reliable method of estimating the population, seven years after a Census any estimate becomes a mere guess founded upon circumstantial evidence, after 1911 we may hope to have a Census taken every fifth year. The population of Bath at the present time may be any number between 48,000 and 52,000. I give my estimate as 50,000, considering the increase in the number of inhabited houses and number of children born this is probably below the true number, but the Registrar-General's method of estimating gives 48,751 as the population of Bath for the middle of the year 1908. If the population of Bath is only 48,000 the nett death-rate was 15·7, if the population is 52,000 the nett death-rate was only 14·4 per 1,000. By my estimate the nett death-rate is 15·1, which when corrected for age and sex variation from standard gives a corrected death-rate of 13·7 per 1,000, compared with 12·9, 13·5, 13·0, 13·3 and 13·4 for the five preceding years. The birth-rate was also above the average, and when the recorded birth-rate and death-rate increase simultaneously, this usually indicates an underestimated population, but there was a marked increase in the birth-rate of other towns, and a slight increase in the birth-rate of the whole country.

The increased mortality was during the severe weather of the first half of the year, when 404 residents died or 73 above the average. During the second half of the year, when the weather was unusually fine and warm, only 305 died in 27 weeks, or 27 below the average of a normal half-year.

The mortality among infants was uniformly below the average, except during the second quarter when 11 were killed by measles, between one and five years the mortality was above the average, 22 being killed by measles. Between 5 and 15 years of age five above the average number died, and from 15 to 35 years of age the mortality was 22 in excess of the average, owing to tuberculosis. Between the ages of 35 and 80 the mortality was normal, but among persons above 80 years of age it was in excess of the average.

Measles and Tuberculosis are the foes with which we have to deal if we would keep the death-rate low. Tuberculosis may be considered under two headings :—Phthisis or Consumption of the Lungs, which causes death principally between the ages of 15 and 35, and other Tubercular diseases such as Consumption of the Bowels and Tubercular Brain Fever (Meningitis), which are particularly fatal to young children. We are doing all that we can practically do to combat Phthisis, and we may hope to prevent the disease in the next generation, but we do not yet know what proportion of the existing cases can be cured, or in how many persons the disease is latent, but ready to manifest its power under conditions favourable to disease. Information on these points is being gradually acquired and we know that it is difficult to prevent relapses, when old conditions recur, but much has been done to prevent the spread of the disease. At present no attempt is being made to deal with Measles effectively. Notification without isolation and treatment would be expensive and almost useless. Measles is the most fatal disease of young children, about one in twenty of those attacked die, but death is only one result, many who survive are injured for life and it is one of the principal causes of bad teeth and diseased ears. During 1907 the number of deaths registered in England and Wales as due to measles was 12,625 and not fewer than 11,712 or 93 per cent. were those of children under the age of five years, and of these 2,753 had not attained the first anniversary of their birth. This Massacre of Innocents occurs year after year and cannot be justified by ascribing it to the ignorance of parents, parents are naturally ignorant of the proper methods of treating disease. The methods which have been successful in lessening scarlet fever mortality might have the same influence with measles.



BATH CENTRAL CLIMATIC STATION, HENRIETTA PARK.

# SUMMARY OF METEOROLOGICAL OBSERVATIONS FOR THE YEAR 1908.

*North Latitude 51° 23' 8", West Longitude 2° 21' 14".*

*Estimated Height above Sea Level: Barometer, 84 feet; Therm*

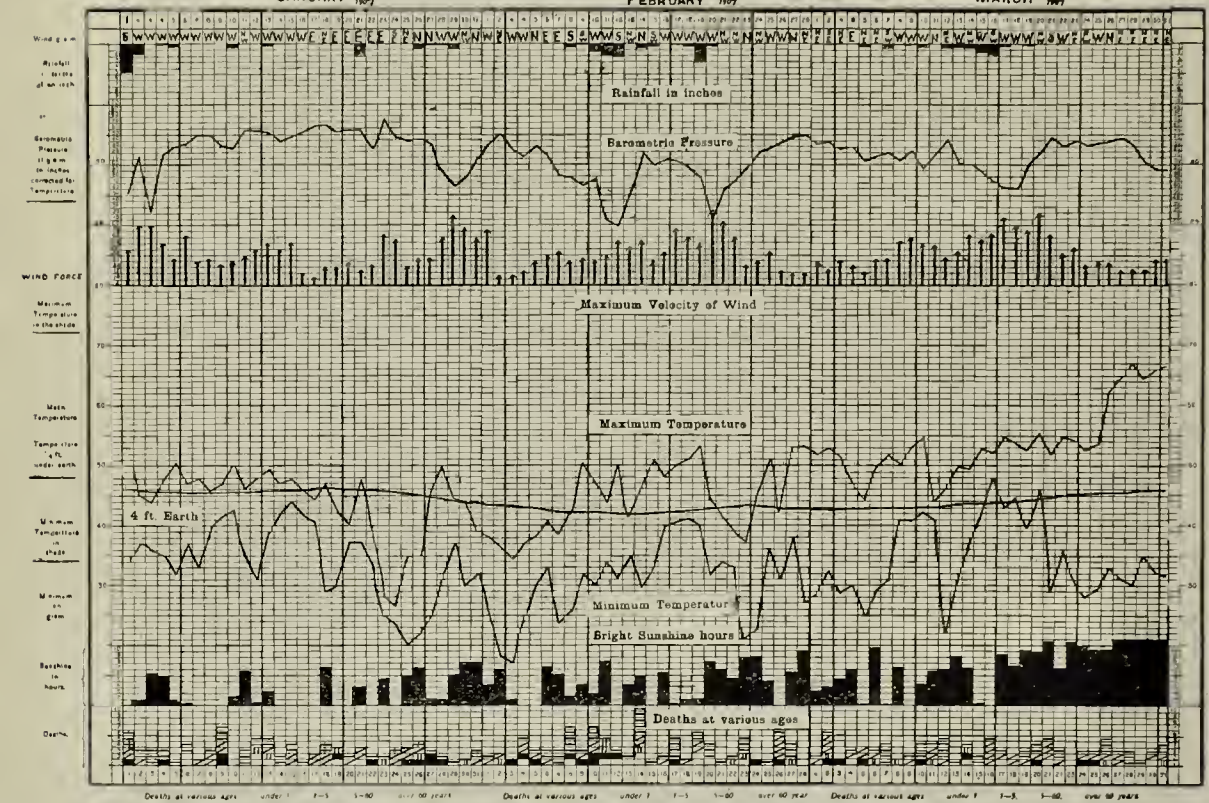
BAROMETER.					THERMOMETERS IN STEVENSON SCREEN.										EARTH TEMPERATURES.				Bright Sunshine in hours.		
1908	Mean 9 a. m. corrected to 32°	Absolute Maximum	Day of Month.	Absolute Minimum	Day of Month.	Range.	Mean Temperature of Air.	Mean of Maximum	Mean of Minimum.	Absolute Maximum.	Day of Month.	Absolute Minimum.	Day of Month.	Mean of Dry Bulb.	Mean of Wet Bulb.	Relative Humidity.	4 Feet in Gravel.			1 Ft. Mean	
																	Max.	Min.			Mean
Jan. ...	30.088	30.471	21	29.056	8	1.415	37.9	43.4	31.9	54.6	17	17.0	11	36.8	35.8	92	47.2	43.3	44.5	38.8	65.4
Feb. ...	30.044	30.603	7	29.224	29	1.469	42.5	48.5	36.5	55.0	19	26.8	2	42.2	40.8	90	44.9	43.4	43.9	41.0	73.5
March	29.784	30.155	15	29.089	6	1.066	40.3	47.3	33.8	57.0	23	24.0	5	40.7	38.3	81	45.2	43.9	44.5	41.9	118.7
April ..	29.879	30.328	7	29.342	25	.986	43.9	51.8	36.8	63.8	30	36.0	7	44.6	41.6	78	47.0	45.2	46.4	45.5	157.3
May ...	29.912	30.411	27	29.259	6	1.152	55.3	63.6	48.0	74.5	31	35.8	11	56.7	52.5	74	54.0	46.8	51.1	54.7	194.7
June ...	29.998	30.315	27	29.616	16	.699	57.8	68.7	49.2	81.3	3	37.5	19	60.6	55.3	71	58.8	54.4	56.9	61.0	271.9
July ...	29.960	30.387	29	29.356	17	1.031	62.1	71.0	54.4	84.8	3	49.8	12	63.9	57.8	67	61.8	59.2	60.7	64.7	232.0
Aug. ...	29.935	30.309	3	29.401	28	.908	59.2	68.6	50.8	79.5	3	41.0	12	61.7	56.6	71	62.4	61.2	61.9	63.1	223.4
Sept. ...	29.892	30.218	5	29.128	1	1.050	55.5	63.3	48.4	78.0	30	37.8	3	57.1	53.7	79	61.1	58.6	59.3	57.8	155.0
Oct. ...	30.023	30.349	22	29.783	16	.566	54.6	62.4	46.9	76.8	1/2	31.0	25	54.0	52.3	88	59.8	56.1	58.8	56.9	120.1
Nov. ...	29.985	30.335	30	29.504	22	.831	47.1	53.4	40.8	60.0	1	24.8	10	46.4	44.7	88	56.0	52.2	53.9	49.1	88.2
Dec. ...	29.827	30.323	1	28.863	11	1.460	41.5	46.6	36.0	55.5	21	16.3	30	41.4	40.2	91	52.2	48.4	50.4	44.8	40.1
Means for Year	29.944	30.354		29.302		1.056	49.8	57.4	42.8	68.4		31.5		50.5	47.5	81	54.2	51.1	52.7	51.6	1740.3

# Meteorological Daily Records, 1907.

CITY OF BATH.  
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH  
JANUARY 1907

CITY OF BATH.  
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH  
FEBRUARY 1907

CITY OF BATH.  
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH  
MARCH 1907



CITY OF BATH.  
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH  
APRIL 1907

CITY OF BATH.  
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH  
MAY 1907

CITY OF BATH.  
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH  
JUNE 1907





# Meteorological Daily Records, 1908.

CITY OF BATH.

CITY OF BATH.

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

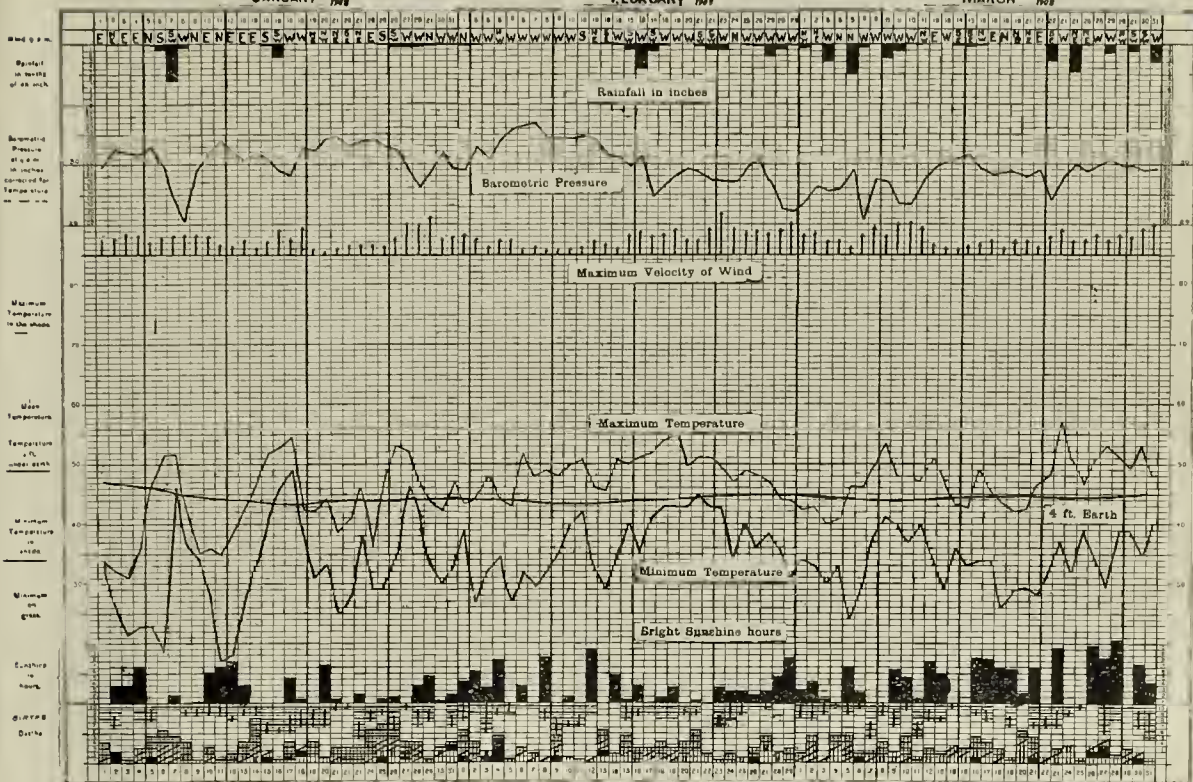
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

JANUARY 1908

FEBRUARY 1908

MARCH 1908



CITY OF BATH.

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CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

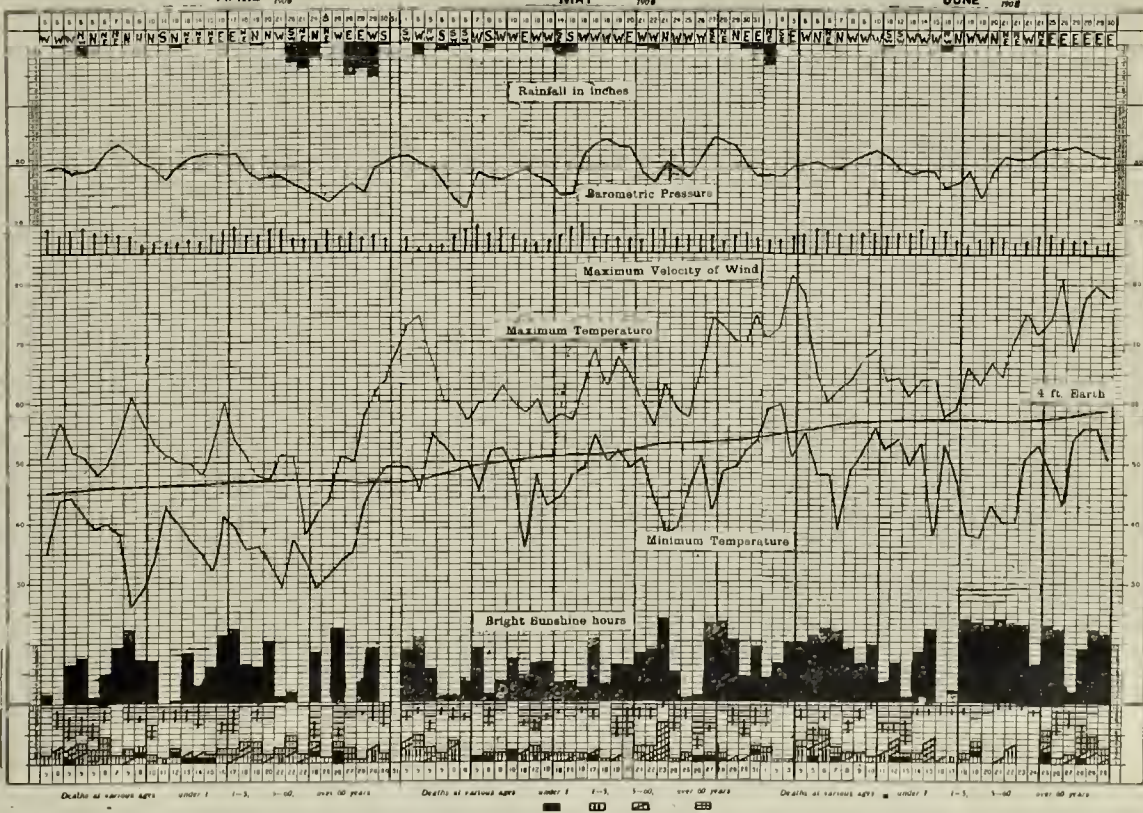
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

APRIL 1908

MAY 1908

JUNE 1908





# Meteorological Daily Records, 1907.

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

JULY 1907

CITY OF BATH.

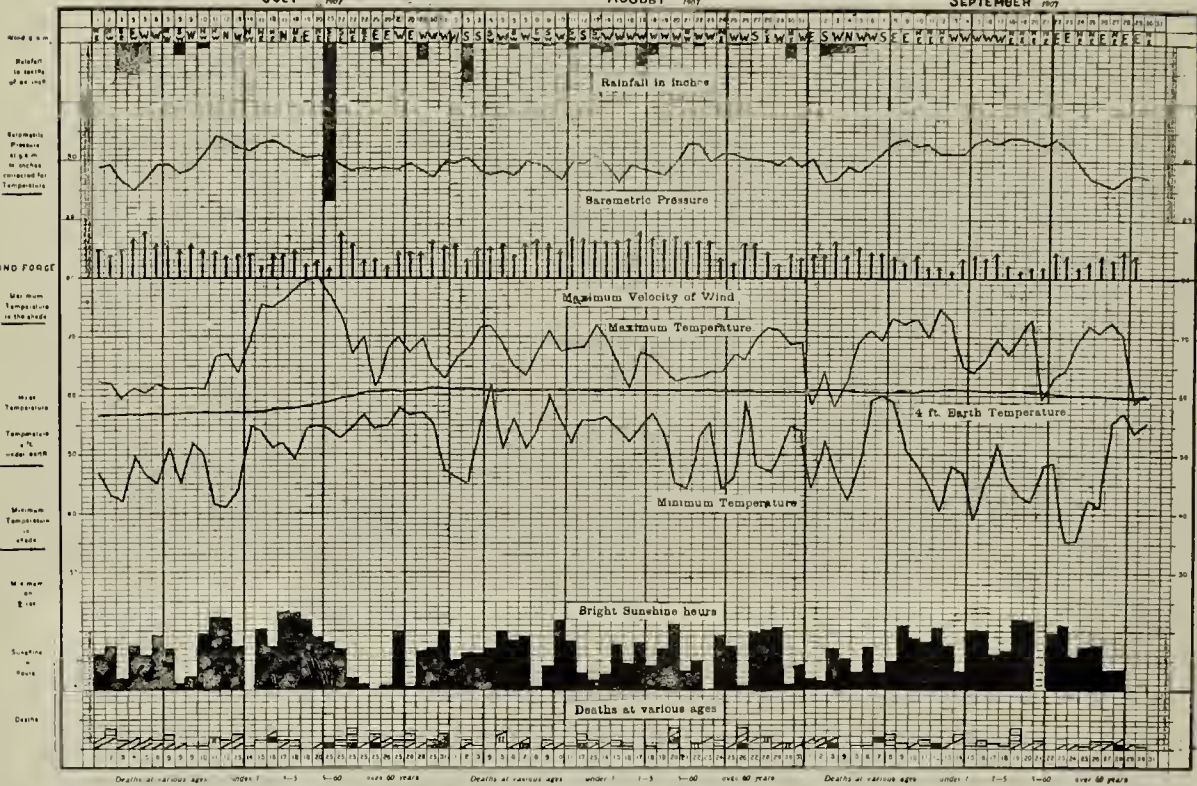
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

AUGUST 1907

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

SEPTEMBER 1907



CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

OCTOBER 1907

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

NOVEMBER 1907

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

DECEMBER 1907





# Meteorological Daily Records, 1908.

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

July 1908

CITY OF BATH.

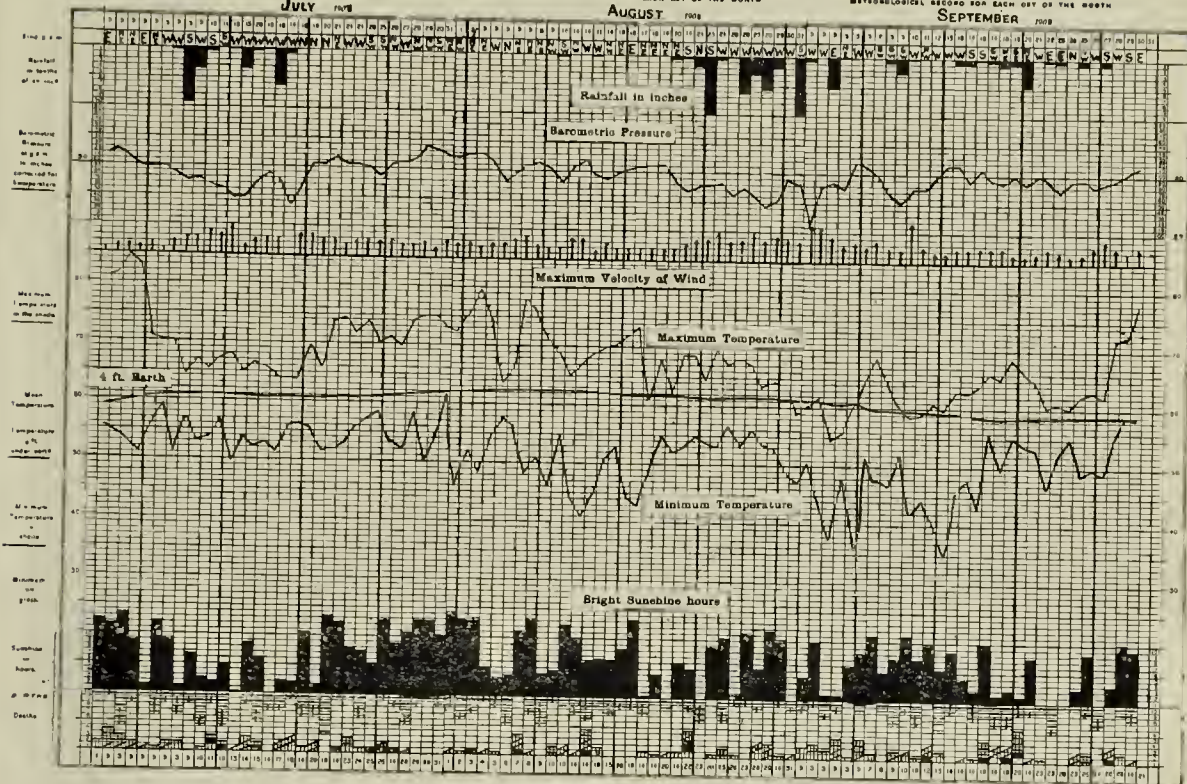
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

August 1908

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

September 1908



CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

October 1908

CITY OF BATH.

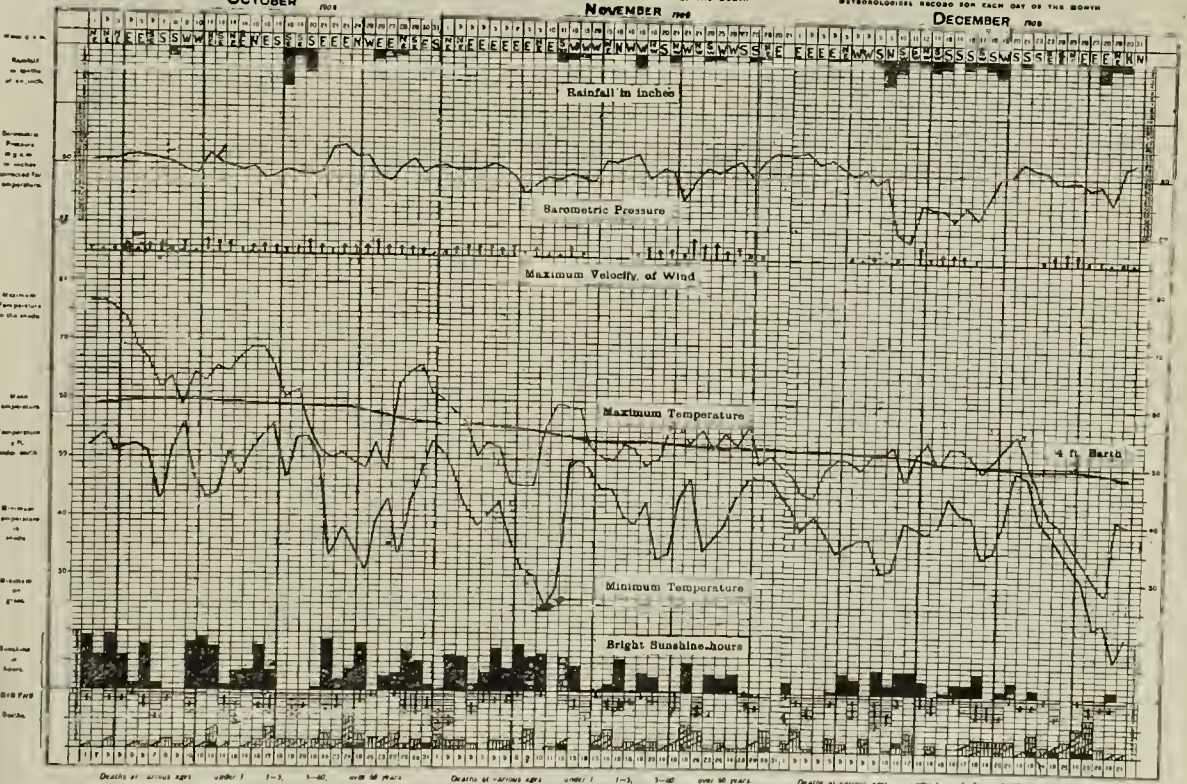
METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

November 1908

CITY OF BATH.

METEOROLOGICAL RECORD FOR EACH DAY OF THE MONTH

December 1908



Deaths at various ages under 1 1-5 5-10 over 10 years

Deaths at various ages under 1 1-5 5-10 over 10 years

Deaths at various ages under 1 1-5 5-10 over 10 years



# MONTHLY RAINFALL AT VARIOUS BATH STATIONS, 1908.

Mean Monthly Rainfall, Years 1866—1905.

Observations 9 a.m. daily, at all Stations, 1908.	Central Station, Henrietta Pk. N. Latitude, 51° 23' 8" W. Longitude, 2° 21' 14" 5 in. Gauge. O.D. 67 ft.				Kingswood School. N. Latitude, 51° 23' 27" W. Longitude, 2° 22' 27" 5 in. Gauge. O.D. 620 ft.				Monkswood. N. Lat. 51° 26' 19" W. Longitude, 2° 21' 16" 5 in. Gauge. O.D. 363 ft.				Bathaston. N. Lat. 51° 24' 53" W. Longitude, 2° 19' 51" 5 in. Gauge. O.D. 248 ft.				Charlcombe. N. Lat. 51° 23' 49" W. Longitude, 2° 21' 37" 8 in. Gauge. O.D. 325 ft.				Climatic Station, Statutory Hospital. N. Latitude, 51° 21' 52" W. Longitude, 2° 19' 10" 5 in. Gauge. O.D. 520 ft.				Royal Literary Institution. N. Lat. 51° 22' 52" W. Longitude, 2° 21' 21" 6 in. Gauge. O.D. 74 ft.				Mean 40 Years 1866-1905.
	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	Rain and Snow Total depth in inches.	Number of Days on which Rain fell.	Greatest fall in 24 hours.	Date.	
January ..	1.24	13	.61	7	1.52	13	.53	1.47	1.38	1.58	1.53	1.47	1.38	1.58	1.53	.62	9	1.53	9	.62	7	1.53	9	.62	7	1.23	2.82		
February ..	1.32	17	.41	16	1.48	17	1.41	1.47	1.48	1.36	1.49	1.47	1.48	1.36	1.49	.45	13	1.49	13	.45	16	1.24	13	.45	16	1.24	2.24		
March ..	2.72	19	.51	5	2.73	19	2.84	2.70	2.96	2.63	2.81	2.70	2.96	2.63	2.81	.59	14	2.81	14	.59	5	2.47	14	.59	5	2.47	2.07		
April ...	2.99	14	.58	29	2.97	14	2.76	3.16	3.14	2.85	3.15	3.16	3.14	2.85	3.15	.60	14	3.15	14	.60	29	2.81	14	.60	29	2.81	2.07		
May ..	1.15	15	.20	2	1.43	15	1.32	1.64	1.43	1.46	1.49	1.64	1.43	1.46	1.49	.23	17	1.49	17	.23	14	1.03	17	.23	14	1.03	2.03		
June .	0.51	4	.35	1	0.73	4	0.50	1.15	1.08	.74	0.69	1.15	1.08	.74	0.69	.30	9	0.69	9	.30	1	0.57	9	.30	1	0.57	2.22		
July ..	2.53	12	.8	8	2.62	12	2.45	2.78	2.91	2.42	2.69	2.78	2.91	2.42	2.69	1.03	12	2.69	12	1.03	8	2.45	12	1.03	8	2.45	2.53		
August .	4.15	13	1.11	31	3.75	13	3.88	3.79	3.79	4.22	4.31	3.79	3.79	4.22	4.31	1.15	12	4.31	12	1.15	31	4.01	12	1.15	31	4.01	2.81		
September	2.11	17	.54	3	2.55	17	2.26	2.20	2.27	2.47	2.75	2.20	2.27	2.47	2.75	.57	16	2.75	16	.57	3	2.31	16	.57	3	2.31	2.83		
October ..	1.72	10	.62	18	1.73	10	1.51	.51	2.01	1.78	2.31	.51	2.01	1.78	2.31	.86	10	2.31	10	.86	18	1.78	10	.86	18	1.78	3.05		
November	0.96	11	.23	18	1.07	11	0.91	1.23	1.11	1.16	1.20	1.23	1.11	1.16	1.20	.24	11	1.20	11	.24	18	.97	11	.24	18	.97	2.82		
December	2.73	23	.44	9	2.84	23	2.92	2.52	2.65	2.85	2.97	2.52	2.65	2.85	2.97	.44	18	2.97	18	.44	30	2.61	18	.44	30	2.61	2.99		
Totals	24.13	168			25.42	168	24.29	24.62	26.21	25.52	27.39	24.62	26.21	25.52	27.39		155					23.48				23.48	30.48		

## Meteorology.

Meteorological observations have been regularly made at the three stations equipped by the Corporation, and also at the Royal Literary and Scientific Institution, and at my own Observatory. Sunshine records are taken at Alexandra Park and the Guildhall. Rainfall is also measured at the Monkswood, Batheaston and Charlcombe Reservoirs. Barograms are automatically registered at the Pump Room and Kingswood School. The Kingswood School Chart being kindly sent to me by Mr W. P. Workman, B.Sc. I am also indebted to the numerous rainfall observers whose observations are published on page 58.

Observations are made at 9 a.m. but at the Henrietta Park Station the readings are also taken at 7 a.m. and 6 p.m., and telegraphic reports are transmitted to the Meteorological Office twice daily. Monthly reports are given to the Registrar General, to the Meteorological Society, to British Rainfall and to the Editor of Symons' Meteorological Magazine ; a report is also sent weekly to the Meteorological Office. Numerous enquiries from public bodies and private individuals are as far as possible answered. Daily records are published on pp. 54-57 for the years 1907 and 1908 for the purpose of comparison.

In the charts for 1908 the number of births taking place on each day are shown.

## Conclusion.

As was anticipated, the year has been one with ample opportunity for work, the preparation for the medical inspection of school children overshadowed routine work during the first half of the year, and that in connection with the proposed extension of the boundary did not leave much time to spare in the second half. Fortunately there was no serious outbreak of disease, except the triennial visitation of measles and a marked increase in the number of deaths from tuberculosis. The additions to the staff recently sanctioned should enable us to take advantage of the new Order relating to tuberculosis, but while we may do, and have done, a great deal to prevent the spread of this disease, permanent cures are only possible when the cases are taken in an early stage and when

the Sanatorium treatment is followed by "after care" and the patient kept under favourable conditions ; this must be done by voluntary helpers.

Good work has been done in connection with the prevention of infantile mortality, but we have been, unfortunately, not able to work continuously—the Health Visitor appointed early in the year was required at home and resigned her post in June, the lady who succeeded her was unable to continue owing to bad health, and it was not until December that regular work could be resumed. I look forward to a federation of various agencies,—a Babies' Welcome Society, worked on a voluntary basis to advise and assist those about to be mothers ; the Health Visitor, to visit every month during the first year of life ; the Mothers' Help Association, to follow up the work of the Health Visitor and show a kindly interest in the children until they reach school age and are subject to medical inspection and are instructed in general hygiene. Such work requires careful administration to prevent abuse ; to quote again from John Stuart Mill, "The problem to be solved is therefore one of peculiar nicety and importance ; how to give the greatest amount of needful help, with the smallest encouragement to undue reliance upon it."

Finally, I wish to acknowledge the information received from the City Surveyor's Department and from other colleagues at all times and also the cheerful assistance I have had from each member of the Staff of the Health Department. Mr. Craven has given me more assistance than usual with this report and has written most of the pages relating to the food supply and to factories and workshops and general sanitary work, in consultation with me. I have also to express my sincere thanks to the Chairmen and Members of the various Committees of the Council for the kind consideration shown to me.

I remain,

Your obedient servant,

W. H. SYMONS.

Guildhall, Bath ;

*April 5th, 1909.*